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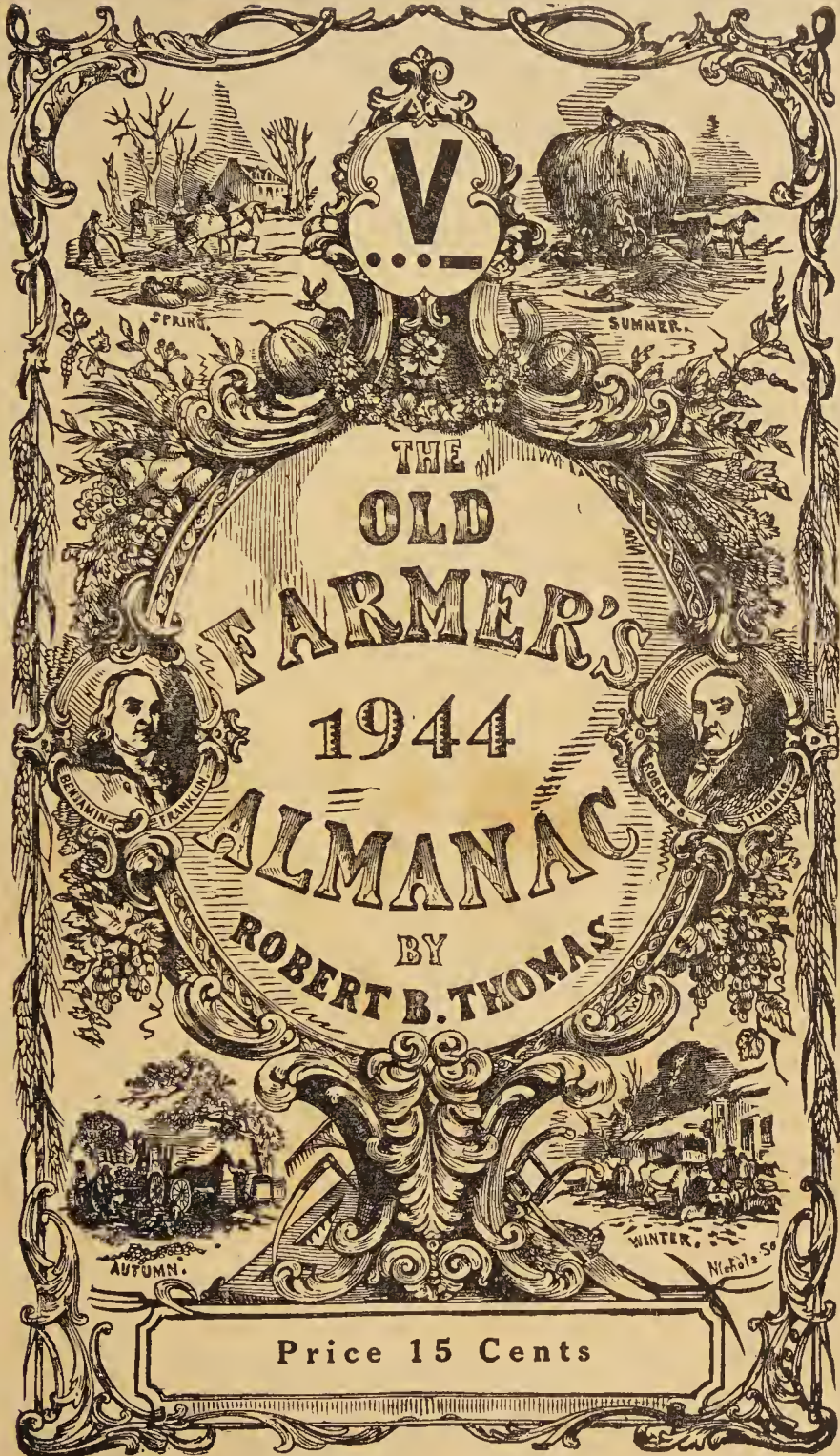
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The 152nd Continuous Year of Publication



THE  
 OLD  
 FARMER'S  
 1944  
 ALMANAC  
 BY  
 ROBERT B. THOMAS

Price 15 Cents

Weather Indications

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# Free enterprise for free men

The colonist who cleared land for a farm in the wilderness and the American farmer of today are two fine symbols of free men carrying on free enterprise. Under this system our country has grown and flourished. We are now fighting to preserve this principle so that we may grow and prosper in the future.

Free enterprise put electricity, bathtubs, and radios into millions of American homes. Men and women who were free to think, act, speak, spend and save as they believed best have been responsible for America's high standard of living. The free enterprise which they sponsored, the capital which they invested, directly or through life insurance and savings, furthered our agricultural development and built our mighty industries. These industries were so strong, so well equipped, and so well staffed, that they could quickly convert to war production when it became necessary.

This system of free enterprise will enable American industries to reconvert to peacetime production when the war is over. The leadership of free men will enable American business to develop new skills, create new jobs, and turn out new products to enrich our daily lives.

As the custodians of the life insurance funds of freedom-loving men and women for more than 81 years, funds which have made a great deal of America's industrial and agricultural progress possible, we look ahead confidently to an even greater future for our country and our policyholders.

*John Hancock*  
MUTUAL  
LIFE INSURANCE COMPANY  
OF BOSTON, MASSACHUSETTS  
GUY W. COX, President

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Number One Hundred and Fifty-Two

THE  
(OLD)  
**FARMER'S ALMANACK,**

CALCULATED ON A NEW AND IMPROVED PLAN  
FOR THE YEAR OF OUR LORD

**1944**

Being BISSEXTILE or LEAP YEAR, and (until July 4)  
168th year of American Independence.

FITTED FOR BOSTON, AND THE NEW ENGLAND STATES, WITH SPECIAL CORRECTIONS AND CALCULATIONS THIS YEAR TO ANSWER FOR ALL THE UNITED STATES.

Containing, besides the large number of Astronomical Calculations  
and the Farmer's Calendar for every month  
in the year, a variety of

NEW, USEFUL, AND ENTERTAINING MATTER.

ESTABLISHED IN 1792

**BY ROBERT B. THOMAS.**



Let there be thistles, there are grapes;  
If old things, there are new;  
Ten thousand broken lights and shapes.  
Yet glimpses of the true.  
Let riffs be rife in prose and rhyme,  
We lack not rhymes and reasons,  
As on this whirligig of Time  
We circle with the seasons.

*Tennyson,*

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BROOKLINE, MASS.

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*Publishers:*  
YANKEE, INC.  
DUBLIN, N. H.

*Sold By:*  
THE AMERICAN NEWS CO.  
AND BRANCHES

## TO PATRONS AND CORRESPONDENTS

This issue is our One Hundred and Fifty-second consecutive annual edition. Your patronage these many years has been and is, in these trying times, a source of particularly real gratification and inspiration. The Almanack staff is at present in the armed forces or in war service. Thus is this edition born in the all too few hours of evenings and Sundays . . . in the candle light of part time labour.

Favourably received since its inception two years ago, the correction table for use by those outside New England is continued herewith. This is at the expense of the Length of Day tables—an omission noted by some with disfavour, yet readily remedied by the simple subtraction of the extent of one day from that of its neighbor.

The title page poems are by David Morton of Amherst, Massachusetts. To Eltinge F. Warner we are indebted for the full and detailed Game Laws. In the absence of Jeremy Scribble, B. M. Rice has prepared the Farmer's Calendars. Old Mr. Weatherwise writes from his government job that his "Weather Indications" of the past year, for the eight months he has been able to verify them, ran about 83% right, . . . and he trusts these included here will do as well. It is to be noted further that without the unselfish cooperation of many government officials this issue would not have been possible. Our thanks, finally, go out to our many friends of the press and radio.

Our President, Franklin D. Roosevelt, appeared in the top frame of our outside cover this past year. My deepest esteem remains for him in this great and responsible office and I have taken it for granted that he will join with us in the substitution therein this year of the Victory "V"—the cause in which we are all unconditionally united. Were the minds of our compilers more given to wishful thinking, I might foresee for you the end of the "duration" ere this year of 1944 is over.

Man, however, in these great things can only propose. God is the true disposer. In this, then, it is by our works and not by our words we would be judged; these we hope will sustain us in the humble though proud station we have so long held.

Your ob'd servant,

*W. O. Thomas.*

November 20, 1943.

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### THE OFFICE OF CENSORSHIP Washington, D. C.

YANKEE, INC.  
Dublin, N. H.  
Gentlemen:

August 30, 1943

Thank you for submitting in proof form the weather indications for The Old Farmer's Almanac for the coming year. Due to your published statement that these are "weather indications," there is no application to them of the request in the "Weather" clause of the Code of Wartime Practices for the American Press that no weather forecasts be published except those issued by the U. S. Weather Bureau.

Your cooperation under the voluntary Code is appreciated.

Very truly yours,

JACK LOCKHART  
Assistant Director (Press)



## 1944

JANUARY.							FEBRUARY.							MARCH.							APRIL.						
S	M	T	W	Th	F	S	S	M	T	W	Th	F	S	S	M	T	W	Th	F	S	S	M	T	W	Th	F	S
-	-	-	-	-	-	1	-	-	1	2	3	4	5	-	-	-	1	2	3	4	-	-	-	-	-	-	1
2	3	4	5	6	7	8	6	7	8	9	10	11	12	5	6	7	8	9	10	11	2	3	4	5	6	7	8
9	10	11	12	13	14	15	13	14	15	16	17	18	19	12	13	14	15	16	17	18	9	10	11	12	13	14	15
16	17	18	19	20	21	22	20	21	22	23	24	25	26	19	20	21	22	23	24	25	16	17	18	19	20	21	22
23	24	25	26	27	28	29	27	28	29	-	-	-	-	26	27	28	29	30	31	-	23	24	25	26	27	28	29
30	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-	-	-	-	-
MAY.							JUNE.							JULY.							AUGUST.						
-	1	2	3	4	5	6	-	-	-	1	2	3	-	-	-	-	-	1	-	-	1	2	3	4	5		
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
28	29	30	31	-	-	-	25	26	27	28	29	30	-	23	24	25	26	27	28	29	27	28	29	30	31	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	31	-	-	-	-	-	-	-	-	-	-	-	-
SEPTEMBER.							OCTOBER.							NOVEMBER.							DECEMBER.						
-	-	-	-	-	1	2	1	2	3	4	5	6	7	-	-	1	2	3	4	-	-	1	2	3	4	5	
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
24	25	26	27	28	29	30	29	30	31	-	-	-	-	26	27	28	29	30	-	-	24	25	26	27	28	29	30
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	-	-	-	-	-	-

Consider now the stuttering sailor who upon seeing a shipmate overboard rushed aft to tell the captain. He was so terrified he could only mouth helplessly: "B-b-b-". "Sing it man," roared the captain, "sing it." Whereupon the sailor (for 'tis well known that stutterers can always sing) chanted:

"Overboard goes Barnabas—  
Half a mile astern of us."

## 1945

JANUARY.							FEBRUARY.							MARCH.							APRIL.						
S	M	T	W	Th	F	S	S	M	T	W	Th	F	S	S	M	T	W	Th	F	S	S	M	T	W	Th	F	S
-	1	2	3	4	5	6	-	-	-	-	1	2	3	-	-	-	-	1	2	3	1	2	3	4	5	6	7
7	8	9	10	11	12	13	4	5	6	7	8	9	10	4	5	6	7	8	9	10	8	9	10	11	12	13	14
14	15	16	17	18	19	20	11	12	13	14	15	16	17	11	12	13	14	15	16	17	15	16	17	18	19	20	21
21	22	23	24	25	26	27	18	19	20	21	22	23	24	18	19	20	21	22	23	24	22	23	24	25	26	27	28
28	29	30	31	-	-	-	25	26	27	28	-	-	-	25	26	27	28	29	30	31	29	30	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAY.							JUNE.							JULY.							AUGUST.						
-	-	1	2	3	4	5	-	-	-	-	1	2	1	2	3	4	5	6	7	-	-	1	2	3	4		
6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11
13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18
20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25
27	28	29	30	31	-	-	24	25	26	27	28	29	30	29	30	31	-	-	-	26	27	28	29	30	31	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEPTEMBER.							OCTOBER.							NOVEMBER.							DECEMBER.						
-	-	-	-	-	-	1	-	1	2	3	4	5	6	-	-	-	1	2	3	-	-	1	2	3	4	5	
2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8
9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15
16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22
23	24	25	26	27	28	29	28	29	30	31	-	-	-	25	26	27	28	29	30	-	23	24	25	26	27	28	29
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	31	-	-	-	-	-

## HOW TO USE THE OLD FARMER'S ALMANACK

In accord with longtime usage certain signs are used on the left and right hand pages (8 through 31) to indicate planets, aspects, the Zodiac, etc. Definition of the astronomical terms used appears on pages 35, 36 and 37.

### Names and Characters of the Principal Planets.

☉ The Sun.	♀ Venus.	♃ Jupter.	♆ Neptune.
☾ The-Moon.	♁ The Earth.	♄ Saturn.	♇ Pluto.
☿ Mercury.	♂ Mars.	♅ or ♂ Uranus.	

### Names and Characters of the Aspects.

♌ Conjunction, or in the same degree.	♈ Dragon's Head, or Ascending Node.
☾ Quadrature, 90 degrees.	♉ Dragon's Tail, or Descending Node.
♍ Opposition, or 180 degrees.	

### Names and Characters of the Signs of the Zodiac.

1. ♈ Aries, head.	5. ♌ Leo, heart.	9. ♐ Sagittarius, thighs.
2. ♉ Taurus, neck.	6. ♍ Virgo, belly.	10. ♑ Capricornus, knees.
3. ♊ Gemini, arms.	7. ♎ Libra, reins.	11. ♒ Aquarius, legs.
4. ♋ Canoe, breast.	8. ♏ Scorpio, secrets.	12. ♓ Pisces, feet.

### Chronological Cycles for 1944.

Golden Number . . . . . 7	Solar Cycle . . . . . 21	Roman Indiction . . . . . 12
Epact . . . . . 5	Dominical Letter . . . . . BA	Year of Julian Period 6657

### Movable Feasts and Fasts for 1944.

Septuagesima Sun., Feb. 6	Good Friday, Apr. 7	Whitsunday, May 28
Shrove Sunday, Feb. 20	Easter Sunday, Apr. 9	Trinity Sunday, June 4
Ash Wednesday, Feb. 23	Low Sunday, Apr. 16	Corpus Christi, June 8
1st Sun. in Lent, Feb. 27	Rogation Sunday, May 14	1st Sunday in Advent, Dec. 3
Palm Sunday, Apr. 2	Ascension Day, May 18	

## THE SEASONS, 1944

### Eastern War Time

Winter Solstice (Winter, 1943),	December 22,	1:30 P.M.—Sun enters	Capricornus, ♑
Vernal Equinox (Spring),	March 20,	1:49 P.M.— “ “	Aries, ♈
Summer Solstice (Summer),	June 21,	9:03 A.M.— “ “	Cancer, ♋
Autumnal Equinox (Autumn),	September 23,	12:02 A.M.— “ “	Libra, ♎
Winter Solstice (Winter),	December 21,	7:15 P.M.— “ “	Capricornus, ♑
Vernal Equinox (Spring, 1945),	March 20,	7:38 P.M.— “ “	Aries, ♈

## EARTH IN PERIHELION AND APHELION, 1944

The Earth will be in Perihelion on January 4, 1944, at 2 P.M., distant from the Sun 91,342,000 miles. The Earth will be in Aphelion on July 3, 1944, at 2 A.M., distant from the Sun 94,450,000 miles.

## CALCULATIONS AND CORRECTIONS

While the predictions of the Calendar pages are made for the latitude and longitude of Boston and are in *Eastern War Time*, i.e., one hour fast of Eastern Standard Time, the time of the 75th meridian west of Greenwich, they may be used throughout the United States by applying the corrections given here and in the tables on pages 7, 32, and 37.

The Table given below contains corrections in minutes of time for a number of important places in New England, and any other place in New England can use the correction of the place in the Table which is nearest in longitude to itself.

For the Rising and Setting of the Sun, Moon and Planets add tabular quantity if longitude from Boston is West, but subtract it if East; and this will give the value when the place is in or near the same latitude as Boston. When the latitude of the place differs considerably from that of Boston, the correction will also be right when the celestial body is on or near the Equator; but when it is remote from the Equator so much accuracy cannot be expected.

	East.		West.		West.
	min.		min.		min.
Eastport, Me. . . . .	16	Concord, N.H. . . . .	2	Springfield, Mass. . . . .	6
Bangor, Me. . . . .	9	Nashua, N.H. . . . .	2	Williamstown, Mass. . . . .	9
Augusta, Me. . . . .	5	Plymouth, N.H. . . . .	3	Newport, R.I. . . . .	1
Lswiston, Me. . . . .	4	Kesns, N.H. . . . .	5	Providence, R.I. . . . .	1
Portland, Me. . . . .	3	Montpelier, Vt. . . . .	6	Woonsocket, R.I. . . . .	2
Biddeford, Me. . . . .	2	Brattisboro, Vt. . . . .	6	Nsw London, Conn. . . . .	4
Portsmouth, N.H. . . . .	1	Rutland, Vt. . . . .	8	Willimantic, Conn. . . . .	5
Provincetown, Mass. . . . .	4	Burlington, Vt. . . . .	9	Hartford, Conn. . . . .	6
Gloucester, Mass. . . . .	2	Lowell, Mass. . . . .	1	New Haven, Conn. . . . .	7
Plymouth, Mass. . . . .	2	Worcester, Mass. . . . .	3	Bridgeport, Conn. . . . .	9

Times obtained for a place other than Boston by the conversions described below will in every case be in the War Time of the time zone in which the place lies. Some States by State ordinance do not observe national War Time during the whole or part of the year. To obtain the time in everyday use in those States during the period such State ordinances are in effect one hour should be subtracted from the time derived by conversion. If during any part of the year 1943 the United Nations win the final victory and War Time is terminated nationally, one hour should be subtracted from the times of day obtained from the Almanac to obtain the time in common use, except in those States or Cities in which War Time or "daylight saving" time may be continued by State or local ordinances.

## OUTSIDE NEW ENGLAND

A direct reading of the figures on the Almanac pages gives information that applies precisely and solely to Boston. The examples which follow interpret the significance of this information and illustrate the way to get the same information for a place outside New England, such as Dallas. The date, April 12, used for the purpose of the illustrations, has been chosen at random.

**Sunrise and Sunset.** The times of sunrise and sunset at Boston on April 12 are read directly from columns 4 and 6 on page 14. The key letters adjacent to these times, in columns 5 and 7, are indices to the table on page 7 whereby the times of sunrise and sunset at Boston are converted into those for other key cities, to wit:—

BOSTON		DALLAS	
Sunrise	6:08 A.M.E.W.T.	Sunrise (Boston)	6:08 A.M.E.W.T.
Key Letter	G	Correction (Column G, page 7)	+ :52
		Sunrise (Dallas)	7:00 A.M.C.W.T.
Sunset	7:23 P.M.E.W.T.	Sunset (Boston)	7:23 P.M.E.W.T.
Key letter	K	Correction (Column K, page 7)	+ :35
		Sunset (Dallas)	7:58 P.M.C.W.T.

**Dawn and Dark.** The approximate times dawn will break and dark descend are found by applying the length of twilight taken from the table on page 37 to the times of sunrise and sunset given on the calendar pages. The latitude of the locality determines the column of the table from which the length of twilight is to be selected.

BOSTON (Latitude 42° 22' N.)		DALLAS (Latitude 32° 48' N.)	
Sunrise	6:08 A.M.	Sunrise	7:00 A.M.
Subtract length of twilight (Column 4 of table)	1:39	Subtract length of twilight (Column 4 of table)	1:28
Dawn breaks	4:29 A.M.E.W.T.	Dawn breaks	5:32 A.M.C.W.T.
Sunset	7:23 P.M.	Sunset	7:58 P.M.
Add length of twilight	1:39	Add length of twilight	1:28
Dark descends	9:02 P.M.E.W.T.	Dark descends	9:26 P.M.C.W.T.

**Sun Slow.** The column headed "Sun Slow" is of primary use to sundial enthusiasts. The figures therein tell how slow on each day the time indicated by a properly adjusted and graduated sundial will be of the time indicated by a clock. On April 12 sun time in Boston will be 45 minutes slow of Eastern War Time. The time indicated by a sundial located elsewhere than in Boston is converted to clock time by applying two corrections, the "sun slow" correction for Boston and that for the locality given in Column I of the table on page 7.

BOSTON		DALLAS	
Sundial time	3:34 P.M.	Sundial time	10:17 A.M.
Sun slow	+ :45	Sun slow	+ :45
Eastern War Time	4:19 P.M.	Correction (Column I, page 37)	+ :43
		Central War Time	11:45 A.M.



**Length of Day.** The figures in the column headed "Length of Day" give directly the length of time the Sun will be above the horizon at Boston. The length of day in other localities is found by subtracting the time of sunrise from that of sunset for each locality. (See *Sunrise and Sunset* above).

BOSTON		DALLAS	
Length of day	13h 15m	Sunset	7:58 P.M.
(From calendar pages)		Sunrise	7:00 A.M.
		Length of Day	<hr/> 12h 58m

**High Tides.** The figures for Full Sea in Columns 11 and 12 of the left hand Almanac pages 8-30 are the times of high tide at Commonwealth Pier in Boston Harbor. The heights of these tides are given on the right hand pages 9-31. The heights are reckoned from Mean Low Water: each day has a set of figures — upper for the morning — and lower for the evening. Since Gulf ports are not beset with the tidal problems of ports on the open ocean, the conversion of the times of the tides at Boston to those of Miami is given by way of illustration.

BOSTON		MIAMI	
High Tide	2:45 P.M.E.W.T.	High tide (Boston)	2:45 P.M.
		Correction page 37	—3:00
		High tide (Miami)	<hr/> 11:45 A.M.E.W.T.
Height	9.0 feet	Height (Miami)	2.7 feet
		(9.0 x 0.3)	

**Moonrise and Moonset.** The procedure for finding the times of moonrise and moonset follows that for finding those of sunrise and sunset except that, for localities outside New England, the constant additional correction taken from Column 3 on page 7 must be applied.

BOSTON		DALLAS	
Moonrise	11:28 P.M.E.W.T.	Moonrise (Boston)	11:28 P.M.
Key letter	N	Correction (Column N, page 7)	+ :23
		Correction (Column 3, page 7)	+ :04
		Moonrise (Dallas)	<hr/> 11:55 P.M.C.W.T.

**Moon Souths.** The time the moon souths in Boston is converted to the time it is due south in a locality other than Boston by applying the appropriate corrections from Columns I and 3 on page 7.

BOSTON		DALLAS	
Moon souths	3:34 A.M.E.W.T.	Moon souths (Boston)	3:34 A.M.
		Correction (Column I, page 7)	+ :43
		Correction (Column 3, page 7)	+ :04
			<hr/> 4:21 A.M.C.W.T.

The other information concerning the Moon contained on the left hand Almanac pages applies without correction throughout the United States.

**Risings and Settings of the Planets.** The times of the rising and setting of the naked eye Planets with the exception of Mercury are given for Boston in the table on page 32. The procedure for converting these times to those of other localities follows that for converting the times of sunrise and sunset given above.

**Planetary Aspects.** The planetary aspects indicated by the symbols and abbreviations on the right hand Almanac pages 9-31, are explained on pages 35 and 36.

ALMANAC DATA — OUTSIDE NEW ENGLAND  
 TABLE FOR FINDING TIMES OF SUNRISE, SUNSET, MOONRISE, MOONSET, AND RISING AND SETTING  
 OF PLANETS TO WITHIN 5 MIN. ACCURACY ANYWHERE IN U. S. A.  
 (See explanation preceding pages 4, 5, and 6.)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	☾
	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Your town (interpolate between nearest two). SUBTRACT OR ADD these MINUTES to Almanac times given.																		
Atlanta, Ga.....	+22	+18	+15	+11	+8	+5	+1	-2	-6	-11	-14	-18	-21	-25	-28	-31	-35	+2
Butte, Mont.....	+31	+33	+35	+37	+39	+41	+42	+44	+46	+48	+50	+52	+54	+56	+58	+60	+62	+6
Charleston, W. Va. ....	+57	+55	+53	+51	+50	+48	+46	+45	+46	+48	+39	+37	+35	+33	+32	+30	+28	+2
Chicago, Ill.....	+8	+8	+8	+7	+7	+7	+7	+6	+6	+6	+5	+5	+5	+5	+4	+4	+4	+2
Cincinnati, O.....	+66	+64	+63	+61	+60	+59	+57	+56	+54	+52	+51	+49	+48	+46	+45	+44	+42	+2
Dallas, Tex.....	+74	+70	+66	+63	+59	+56	+52	+48	+43	+38	+35	+31	+27	+23	+19	+16	+12	+4
Denver, Colo.....	+26	+24	+23	+22	+21	+20	+19	+17	+16	+14	+13	+12	+11	+9	+8	+7	+6	+4
Des Moines, Ia.....	+34	+33	+33	+33	+32	+32	+32	+31	+31	+30	+30	+29	+29	+29	+28	+28	+28	+3
Detroit, Mich.....	+48	+48	+48	+48	+48	+48	+48	+48	+48	+48	+48	+48	+48	+48	+48	+48	+48	+2
Indianapolis, Ind.....	+10	+9	+8	+6	+5	+4	+3	+2	+1	-1	-2	-3	-4	-5	-6	-7	-8	+2
Jacksonville, Fla.....	+80	+76	+71	+67	+62	+58	+53	+48	+43	+37	+32	+27	+23	+18	+14	+9	+5	+2
Los Angeles, Cal.....	+36	+33	+29	+26	+23	+20	+16	+13	+9	+5	+1	-2	-5	-9	-12	-15	-19	+7
Louisville, Ky.....	+13	+11	+10	+8	+6	+5	+3	+1	-1	-3	-5	-7	-8	-10	-12	-14	-16	+2
Miami, Fla.....	+86	+80	+74	+69	+63	+57	+51	+44	+37	+30	+23	+17	+11	+5	-1	-7	-12	+1
Minneapolis-St. Paul, Minn.....	+18	+19	+21	+22	+23	+25	+26	+27	+29	+30	+32	+33	+34	+36	+37	+38	+39	+3
New Orleans, La.....	+57	+53	+48	+43	+38	+33	+28	+22	+16	+10	+5	-1	-6	-9	-15	-20	-25	+3
New York, N. Y.....	+17	+17	+16	+15	+15	+14	+13	+13	+12	+11	+10	+10	+9	+8	+8	+7	+6	+3
Omaha, Neb.....	+44	+43	+43	+42	+42	+41	+41	+40	+40	+39	+39	+38	+38	+37	+37	+36	+35	+4
Philadelphia, Pa.....	+25	+24	+23	+22	+21	+20	+19	+18	+17	+15	+14	+13	+12	+11	+10	+9	+8	+1
Pittsburgh, Pa.....	+43	+42	+41	+41	+40	+39	+38	+37	+36	+35	+34	+33	+32	+31	+31	+30	+29	+1
Raleigh, N. C.....	+53	+50	+47	+45	+42	+40	+37	+34	+31	+27	+24	+22	+19	+16	+14	+11	+8	+1
Richmond, Va.....	+42	+40	+38	+36	+34	+32	+30	+28	+26	+23	+21	+19	+17	+15	+13	+11	+9	+1
Rochester, N. Y.....	+23	+24	+24	+25	+25	+25	+26	+26	+26	+26	+27	+28	+28	+28	+28	+29	+29	+1
St. Louis, Mo.....	+30	+28	+27	+25	+24	+22	+20	+19	+17	+15	+13	+11	+10	+8	+7	+5	+3	+3
Seattle, Wash.....	+4	+7	+9	+12	+14	+17	+20	+23	+25	+28	+31	+34	+37	+39	+42	+45	+48	+8
Topeka, Kans.....	+51	+49	+48	+46	+45	+44	+42	+41	+39	+37	+36	+34	+33	+31	+30	+29	+27	+4



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## JANUARY, FIRST MONTH.

## ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.			Days.			Days.			Days.			Days.		
	0	/		0	/		0	/		0	/		0	/	
1	23s.	03		7	22	27	13	21	35	19	20	28	25	19	07
2	22	58		8	22	20	14	21	25	20	20	15	26	18	52
3	22	53		9	22	11	15	21	14	21	20	02	27	18	37
4	22	47		10	22	03	16	21	03	22	19	49	28	18	21
5	22	41		11	21	54	17	20	52	23	19	35	29	18	06
6	22	34		12	21	45	18	20	40	24	19	21	30	17	50

☽ First Quarter, 2nd day, 4 h. 04 m., afternoon, E.

☾ Full Moon, 10th day, 6 h. 09 m., morning, W.

☾ Last Quarter, 18th day, 11 h. 32 m., morning, W.

● New Moon, 25th day, 11 h. 24 m., morning, E.

KEY LETTERS REFER TO CORRECTIONS TABLE, PAGE 7, FOR ALL POINTS OUTSIDE NEW ENGLAND.

Day of Year	Day of Month	Day of the Week	☉		☽		Length of Days.	Sun m. Slow.	Moon's Age	Full Sea, Boston.		☽'s Place	☽ Sets.	☽'s Key	☽ Souths.
			Rises. h. m.	Key	Sets. h. m.	Key				Morn. h.	Even. h.				
1	1	Sa.	8 13	P	5 22	B	9 09	47	5	4	4 $\frac{1}{2}$	Psc	morn	—	6 03
2	2	S.	8 13	P	5 23	B	9 10	48	6	5	5 $\frac{1}{2}$	Ari	12 04	H	6 53
3	3	M.	8 13	P	5 24	B	9 11	48	7	6	6 $\frac{1}{2}$	Ari	1 12	J	7 42
4	4	Tu.	8 13	P	5 24	B	9 11	49	8	7	7 $\frac{1}{2}$	Ari	2 20	K	8 30
5	5	W.	8 13	P	5 25	B	9 12	49	9	8	8 $\frac{1}{2}$	Tau	3 25	L	9 19
6	6	Th.	8 13	P	5 26	B	9 13	50	10	9	9 $\frac{1}{2}$	Tau	4 30	M	10 09
7	7	Fr.	8 13	P	5 27	B	9 14	50	11	9 $\frac{3}{4}$	10 $\frac{1}{2}$	G'm	5 32	N	10 59
8	8	Sa.	8 13	O	5 28	B	9 15	50	12	10 $\frac{3}{4}$	11 $\frac{1}{4}$	G'm	6 30	O	11 49
9	9	S.	8 13	O	5 29	C	9 17	51	13	11 $\frac{1}{2}$	—	Cnc	7 25	O	morn
10	10	M.	8 12	O	5 30	C	9 18	51	○	0	0	Cnc	rises	—	12 39
11	11	Tu.	8 12	O	5 32	C	9 19	52	15	0 $\frac{1}{2}$	0 $\frac{3}{4}$	Cnc	6 51	C	1 28
12	12	W.	8 12	O	5 33	C	9 21	52	16	1 $\frac{1}{4}$	1 $\frac{1}{2}$	Leo	7 48	D	2 16
13	13	Th.	8 12	O	5 34	C	9 22	52	17	2	2	Leo	8 46	E	3 02
14	14	Fr.	8 11	O	5 35	C	9 24	53	18	2 $\frac{3}{4}$	2 $\frac{3}{4}$	Vir	9 44	F	3 46
15	15	Sa.	8 11	O	5 36	C	9 25	53	19	3 $\frac{1}{4}$	3 $\frac{1}{2}$	Vir	10 42	H	4 29
16	16	S.	8 10	O	5 37	C	9 27	54	20	4	4 $\frac{1}{4}$	Vir	11 41	I	5 11
17	17	M.	8 10	O	5 38	C	9 28	54	21	4 $\frac{3}{4}$	5	Lib	morn	—	5 54
18	18	Tu.	8 09	O	5 40	C	9 30	54	22	5 $\frac{1}{2}$	6	Lib	12 40	J	6 37
19	19	W.	8 09	O	5 41	C	9 32	55	23	6 $\frac{1}{2}$	6 $\frac{3}{4}$	Scor	1 42	K	7 22
20	20	Th.	8 08	O	5 42	C	9 34	55	24	7 $\frac{1}{4}$	7 $\frac{3}{4}$	Scor	2 45	L	8 10
21	21	Fr.	8 08	O	5 43	C	9 36	55	25	8 $\frac{1}{4}$	8 $\frac{3}{4}$	Scor	3 51	M	9 01
22	22	Sa.	8 07	O	5 44	C	9 37	55	26	9	9 $\frac{1}{2}$	Sgr	4 58	N	9 57
23	23	S.	8 06	O	5 46	C	9 39	56	27	10	10 $\frac{1}{2}$	Sgr	6 04	O	10 56
24	24	M.	8 06	N	5 47	D	9 41	56	28	10 $\frac{3}{4}$	11 $\frac{1}{4}$	Cap	7 06	O	11 58
25	25	Tu.	8 05	N	5 48	D	9 43	56	●	11 $\frac{3}{4}$	—	Cap	sets	—	1 00
26	26	W.	8 04	N	5 50	D	9 46	56	1	0 $\frac{1}{4}$	0 $\frac{1}{2}$	Aqr	7 17	E	2 01
27	27	Th.	8 03	N	5 51	D	9 48	57	2	1	1 $\frac{1}{4}$	Aqr	8 32	G	2 59
28	28	Fr.	8 02	N	5 52	D	9 50	57	3	2	2 $\frac{1}{4}$	Psc	9 47	H	3 55
29	29	Sa.	8 01	N	5 53	D	9 52	57	4	2 $\frac{3}{4}$	3 $\frac{1}{4}$	Psc	11 00	I	4 47
30	30	S.	8 00	N	5 55	D	9 54	57	5	3 $\frac{3}{4}$	4	Ari	morn	—	5 38
31	31	M.	7 59	N	5 56	D	9 57	57	6	4 $\frac{1}{2}$	5	Ari	12 09	J	6 27



Though now the light is thin, and the breath frost  
That all too soon is scattered,  
The shape broken, the sound too early lost,  
As though no speaking mattered,  
It was the body of this breath that passed:  
The word was, in the beginning, and will last.

D. M.	D. W.	Aspects, Holidays, Heights of High Water, Weather, etc.	Farmer's Calendar.
1	Sa.	Circumcision. Tides { 10.0 10.4	Clear
2	B	on Eq. Tides { 9.9 9.9	then
3	M.	♀ in Peri. Tides { 9.8 9.4	signs
4	Tu.	Gary Calkins ⊕ in Peri. Tides { 9.8 9.0	of
5	W.	Tides { 9.8 18.8	H. C. Pearson d. 1943 (6th) snow.
6	Th.	Epiph. ♂♂♂♂♂♂♂♂♂♂ Stat. in { 9.9 R.A. { 8.7	
7	Fr.	♂ h C A. Lawrence Low-ell d. 1943 (6th) { 10.0 8.6	Damp
8	Sa.	Battle of New Orleans ♂♀ ⊙ Inf. { 10.1 9.7	
9	B	1st S. a. Epi. C Runs in Tides { 10.1 8.7	but not mild.
10	M.	Plow Monday ♂ Stat. in R.A. { 10.1	
11	Tu.	Gt. Br. & U. S. rel. rts. China 1943 Tides { 8.7 10.0	
12	W.	Lavater d. 1801 Tides { 8.7 9.3	A cold
13	Th.	Laura E. Richards d. 1943 (Act. 92) 14th Gr. Hel. { 8.6 9.3	spell.
14	Fr.	St. Hilary (br-r-rl) ♀ Lat. N. { 8.6 9.0	
15	Sa.	"Unconditional Surrender" at Casablanca 14-24, 1943 { 8.8 8.7	Now
16	B	2d S. a. Ep. ♂ ♀ C. on Eq. Tides { 8.5 8.4	look
17	M.	Iraq at war w. Germany Tides { 8.5 8.2	for snow.
18	Tu.	Tides { 8.8 8.2	
19	W.	Robt. E. Lee born 1807 Holiday in So. ♀ Stat. in R.A. { 8.7 8.1	
20	Th.	Inaugural Day, 1945 ♂♂♂♂♂♂♂♂♂♂ Tides { 9.0 8.2	A mild
21	Fr.	Chile breaks w. Axis 1943 Tides { 9.4 8.4	spell
22	Sa.	♂♀♂♂♂♂♂♂♂♂♂♂ Tides { 9.9 18.8	begins.
23	B	3rd S. a. Epi. ♂♀♂♂♂♂♂♂♂♂♂♂ runs low. { 10.5 9.2	
24	M.	Jay P. Moffat, 1943. Al. Woolcott d. '43 (23) Whitney Warren d. 1943 Total Tides { 11.0 11.5	
25	Tu.	Conv. of St. Paul. ⊙ eclipse. Tides { 11.5	
26	W.	Judge Henry Shute d. 1943 (25-) C in Peri. { 10.1 11.7	Clear
27	Th.	Great Gale of 1839 Tides { 10.4 11.7	cold
28	Fr.	Tides { 10.6 11.5	weather
29	Sa.	F.D.R. Birthday Ball C on Eq. Tides { 10.6 11.1	
30	B	4th S. a. E. Chas. I beh' ded 1649 { 10.5 10.5	now.
31	M.	Stalingrad re-occupied 1943 ♀ Gr. E. W. Tides { 10.8 9.8	

**Happy New Year to You!**

This is the month to "put your house in order," a month for reflection and planning and resolution. The New Year is as bleak and bare as your fields, now, but it awaits only your sowing. This year especially consider shrewdly your acres and their yield. Measure your gains and losses with an eye to the future.

Catch up on all the loose ends you have had no time for before. Inventory your livestock, your grain and supplies, all your tools and implements. See that all farm machinery is under cover before the big snows of February.

Look to your seeds. Are they in a safe place, dry and free from mice and rats? Check over your apples in the cold cellar. The first signs of spoilage will show up now. You may want to wrap those prize Macs and Baldwins individually in paper. Leave plenty of air space between your boxes and do not pack them too tightly. Place newspapers between the layers of apples. Are the carrots, turnips and beets well covered with sand? Are your cabbages and squashes in a good dry place, well protected from the cold?

This month your farm is your cellar and your barn. Put them in order.

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FEBRUARY, SECOND MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days	0 /	Days.	0 /	Days.	0 /	Days.	0 /	Days.	0 /				
	1	17s.	16	7	15	30	13	13	34	19	11	30	25	9
2	16	59	8	15	11	14	13	14	20	11	08	26	8	57
3	16	42	9	14	52	15	12	53	21	10	47	27	8	35
4	16	24	10	14	33	16	12	33	22	10	25	28	8	12
5	16	07	11	14	13	17	12	12	23	10	03	29	7	49
6	15	48	12	13	54	18	11	51	24	9	41			

- ☽ First Quarter, 1st day, 3 h. 08 m., morning, W.
- ☾ Full Moon, 9th day, 1 h. 29 m., morning, W.
- ☾ Last Quarter, 17th day, 3 h. 42 m., morning, E.
- New Moon, 23rd day, 9 h. 59 m., evening, W.

KEY LETTERS REFER TO CORRECTIONS TABLE, PAGE 7, FOR ALL POINTS OUTSIDE NEW ENGLAND.

Day of Year	Day of Month	Day of the Week	☉ Rises h. m.	☉ Key	☉ Sets h. m.	☉ Key	Length of Days h. m.	Sun P. Slow.	Noon's Age	Full Sea. Boston. Morn h. Even	D's Place	D Sets h. m.	D Key	D Souths. h. m.	
32	1	Tu.	7 58	N	5 57	D	9 59	58	7	5 1/2	6	Tau	1 17	L	7 17
33	2	W.	7 57	N	5 59	D	10 01	58	8	6 1/2	7	Tau	2 22	M	8 06
34	3	Th.	7 56	M	6 00	D	10 04	58	9	7 1/2	8 1/4	G'm	3 25	N	8 56
35	4	Fr.	7 55	M	6 01	E	10 06	58	10	8 1/2	9 1/4	G'm	4 25	C	9 46
36	5	Sa.	7 54	M	6 02	E	10 08	58	11	9 1/2	10	G'm	5 20	O	10 35
37	6	S.	7 53	M	6 04	E	10 11	58	12	10 1/4	10 3/4	Cnc	6 11	O	11 25
38	7	M.	7 52	M	6 05	E	10 13	58	13	11	11 1/2	Cnc	6 55	O	morn
39	8	Tu.	7 51	M	6 06	E	10 16	58	14	11 3/4	—	Leo	7 35	N	12 12
40	9	W.	7 50	M	6 08	E	10 18	58	15	0 1/4	0 1/4	Leo	rises	—	12 59
41	10	Th.	7 48	M	6 09	E	10 21	58	16	0 3/4	1	Leo	7 37	F	1 44
42	11	Fr.	7 47	M	6 10	E	10 23	58	17	1 1/2	1 3/4	Vir	8 35	G	2 27
43	12	Sa.	7 46	M	6 12	E	10 26	58	18	2	2 1/4	Vir	9 33	H	3 10
44	13	S.	7 44	L	6 13	E	10 28	58	19	2 3/4	3	Lib	10 32	I	3 52
45	14	M.	7 43	L	6 14	F	10 31	58	20	3 1/2	3 3/4	Lib	11 32	J	4 34
46	15	Tu.	7 42	L	6 15	F	10 34	58	21	4	4 1/2	Lib	morn	—	5 17
47	16	W.	7 40	L	6 17	F	10 36	58	22	4 3/4	5 1/2	Scor	12 33	L	6 03
48	17	Th.	7 39	L	6 18	F	10 39	58	23	5 3/4	6 1/4	Scor	1 36	M	6 51
49	18	Fr.	7 37	L	6 19	F	10 42	58	24	6 1/2	7 1/4	Sgr	2 40	N	7 43
50	19	Sa.	7 36	L	6 21	F	10 45	58	25	7 1/2	8 1/2	Sgr	3 44	O	8 38
51	20	S.	7 35	L	6 22	F	10 47	58	26	8 1/2	9 1/4	Cap	4 47	O	9 37
52	21	M.	7 33	L	6 23	F	10 50	58	27	9 1/2	10	Cap	5 45	O	10 38
53	22	Tu.	7 32	L	6 24	F	10 53	58	28	10 1/2	11	Aqr	6 37	N	11 39
54	23	W.	7 30	K	6 26	G	10 56	58	●	11 1/4	11 3/4	Aqr	sets	—	12 39
55	24	Th.	7 29	K	6 27	G	10 58	57	0	—	0 1/2	Psc	7 20	G	1 37
56	25	Fr.	7 27	K	6 28	G	11 01	57	1	0 3/4	1	Psc	8 36	I	2 33
57	26	Sa.	7 26	K	6 29	G	11 04	57	2	1 1/2	2	Ari	9 50	J	3 26
58	27	S.	7 24	K	6 31	G	11 07	57	3	2 1/2	2 3/4	Ari	11 02	K	4 18
59	28	M.	7 22	K	6 32	G	11 09	57	4	3 1/4	3 3/4	Tau	morn	—	5 10
60	29	Tu.	7 21	K	6 33	G	11 12	57	5	4 1/4	4 1/2	Tau	12 10	L	6 01



FEBRUARY hath 29 days.

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Just now, the sleep of flowers  
Is lighter . . . is less sound,  
Is troubled by these showers  
Drumming above ground,  
By dreams, the long night through,  
Of being white . . . or blue . . .

D.M.	D.W.	Aspects, Holidays, Heights of High Water, Weather, etc.	Farmer's Calendar.
1	Tu.	Am. News Co. founded 1864 Tides {10.0 9.1	Look
2	W.	Candlemas. Clouds and rain then winter's gone δ ♂ C. {9.7 8.5	How about that woodlot? There is no better time to get your wood out on the hard-packed snow. Don't overlook cutting your grey birch. When burned green on a hot foundation, it will keep your fire going all night. Make this your home wood and sell the "better grade" hard woods. Best way to handle grey birch is to chop it in eight to twelve foot lengths, draw it right up to the woodshed, and just pitch it in as you saw it up.
3	Th.	Span. Inq. Abol. 1813 δ ♂ C. Tides {9.5 8.8	for
4	Fr.	New Orleans fire 1854 δ ♀ C. Tides {9.5 8.2	more
5	Sa.	runs high Tides {9.5 8.2	snow.
6	B.	Septuag. S. ♀ in ♂. Tides {9.6 8.8	
7	M.	Winant app't sent Congress 1941 Tides {9.6 8.4	Milder
8	Tu.	Tides {9.7	now.
9	W.	E.W.T. hegan 1942 δ ♀ C. {8.6 9.7	Thawing
10	Th.	Normandle capsized 1942 C in Apo. Tides {8.8 9.7	weather
11	Fr.	Lincoln's Birthday. Hol. in parts of N. ♂ ♀ C. {8.9 9.6	cold
12	Sa.	Georgia Stat. Holiday in R.A. δ ♀ C. {8.9 9.4	nights.
13	B.	Serag. S. C on A. Ford 100yd. 50.8 sec. {8.9 9.1	
14	M.	St. Valentine Arizona Holiday Tides {8.9 8.8	Cloudy
15	Tu.	Coldest Day ever on Mt. Wash. 1943 {8.9 8.5	then
16	W.	♀ in Aph. Tides {8.9 8.2	snow.
17	Th.	Auld Deer—the worst day of the year Tides {8.9 8.1	
18	Fr.	100° variation temp. this weekend Tides {9.1 8.1	Clear
19	Sa.	Hancock, N. H. one year ago Tides {9.4 8.8	then rain
20	B.	Quinqua. (Shrove) S. h Stat. in R.A. {10.5 9.3	
21	M.	♂ ♀ C. {10.5 9.3} 20th C runs low. {9.9 8.8	with
22	Tu.	Washington's Shrove Birthday Tuesday δ ♀ C. ♀ in ♂. {11.5 10.5}	
23	W.	Ash Wed. C in Peri. {11.5 10.5}	22nd {11.0 10.0}
24	Th.	Mass. Hort. Soc. fd. 1829 □ ♂ C. {11.7	snow.
25	Fr.	St. Matthias Tides {10.9 11.7	Unpleasant
26	Sa.	C on Eq. Tides {11.1 11.5	underfoot.
27	B.	1st S. in L. Quadrag. Tides {11.1 11.0	
28	M.	Abe Lincoln toured N. E., 1848 Tides {10.8 10.3	
29	Tu.	"Mother Ann" Lee born 1736, founder of the Shakers. . . Tradition doth this year report That maidens are allowed to court {10.4 9.5	

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## MARCH, THIRD MONTH.

## ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.		0 /		Days.		0 /		Days.		0 /		Days.		0 /																																												
	1	7s. 27	7	5 08	13	2 47	19	0 25	25	1 57	2	7 04	8	4 44	14	2 23	20	0s. 01	26	2 21	3	6 40	9	4 21	15	1 59	21	0n. 23	27	2 44	4	6 18	10	3 58	16	1 36	22	0 46	28	3 08	5	5 54	11	3 34	17	1 12	23	1 10	29	3 31	6	5 31	12	3 10	18	0 48	24	1 34	30

☾ First Quarter, 1st day, 4 h. 40 m., evening, E.

☾ Full Moon, 9th day, 8 h. 28 m., evening, E.

☾ Last Quarter, 17th day, 4 h. 05 m., evening, W.

☾ New Moon, 24th day, 7 h. 36 m., morning, E.

☾ First Quarter, 31st day, 8 h. 34 m., morning, E.

KEY LETTERS REFER TO CORRECTIONS TABLE, PAGE 7, FOR ALL POINTS OUTSIDE NEW ENGLAND.

Day of Year	Day of Month	Day of the Week	☉ Rises h. m.	Key	☉ Sets h. m.	Key	Length of Days h. m.	Sun Slow m.	Moon's Age	Full Sea, Boston. Morn h. Even h.	D's Place	D Sets h. m.	Key	D Souths h. m.	
61	1	W.	7 19	K	6 34	G	11 15	56	6	5	5 $\frac{1}{2}$	G'm	1 16	N	6 51
62	2	Th.	7 18	K	6 35	G	11 18	56	7	6	6 $\frac{3}{4}$	G'm	2 18	O	7 42
63	3	Fr.	7 16	K	6 37	G	11 21	56	8	7	7 $\frac{3}{4}$	G'm	3 16	O	8 32
64	4	Sa.	7 14	J	6 38	H	11 23	56	9	8	8 $\frac{3}{4}$	Cnc	4 08	O	9 21
65	5	S.	7 13	J	6 39	H	11 26	56	10	9	9 $\frac{3}{4}$	Cnc	4 54	O	10 10
66	6	M.	7 11	J	6 40	H	11 29	55	11	9 $\frac{3}{4}$	10 $\frac{1}{2}$	Leo	5 35	O	10 56
67	7	Tu.	7 09	J	6 41	H	11 32	55	12	10 $\frac{1}{2}$	11	Leo	6 11	N	11 42
68	8	W.	7 08	J	6 43	H	11 35	55	13	11 $\frac{1}{4}$	11 $\frac{3}{4}$	Leo	6 43	M	morn
69	9	Th.	7 06	J	6 44	H	11 38	55	○	—	0	V.r	rises	—	12 25
70	10	Fr.	7 04	J	6 45	H	11 41	54	15	0 $\frac{1}{4}$	0 $\frac{1}{2}$	Vir	7 27	H	1 08
71	11	Sa.	7 03	J	6 46	H	11 44	54	16	1	1 $\frac{1}{4}$	Lib	8 26	I	1 50
72	12	S.	7 01	J	6 47	H	11 46	54	17	1 $\frac{1}{2}$	1 $\frac{3}{4}$	Lib	9 26	J	2 33
73	13	M.	6 59	J	6 49	I	11 49	54	18	2 $\frac{1}{4}$	2 $\frac{1}{2}$	Lib	10 26	K	3 16
74	14	Tu.	6 58	I	6 50	I	11 52	53	19	2 $\frac{3}{4}$	3 $\frac{1}{4}$	Scor	11 28	L	4 01
75	15	W.	6 56	I	6 51	I	11 55	53	20	3 $\frac{1}{2}$	4	Scor	morn	—	4 47
76	16	Th.	6 54	I	6 52	I	11 58	53	21	4 $\frac{1}{4}$	4 $\frac{3}{4}$	Sgr	12 31	N	5 37
77	17	Fr.	6 52	I	6 53	I	12 01	52	22	5	5 $\frac{3}{4}$	Sgr	1 34	N	6 30
78	18	Sa.	6 51	I	6 54	I	12 04	52	23	6	6 $\frac{3}{4}$	Cap	2 35	O	7 25
79	19	S.	6 49	I	6 55	I	12 07	52	24	7	7 $\frac{3}{4}$	Cap	3 33	O	8 23
80	20	M.	6 47	I	6 57	I	12 09	52	25	8 $\frac{1}{4}$	8 $\frac{3}{4}$	Cap	4 26	N	9 22
81	21	Tu.	6 45	I	6 58	I	12 12	51	26	9 $\frac{1}{4}$	9 $\frac{3}{4}$	Aqr	5 13	M	10 21
82	22	W.	6 44	I	6 59	I	12 15	51	27	10	10 $\frac{3}{4}$	Aqr	5 54	L	11 18
83	23	Th.	6 42	I	7 00	I	12 18	51	28	11	11 $\frac{1}{2}$	Psc	6 32	K	12 15
84	24	Fr.	6 40	I	7 01	I	12 21	50	●	—	0	Psc	sets	—	1 09
85	25	Sa.	6 38	H	7 02	J	12 24	50	1	0 $\frac{1}{4}$	0 $\frac{3}{4}$	Ari	8 37	K	2 03
86	26	S.	6 37	H	7 03	J	12 27	50	2	1 $\frac{1}{4}$	1 $\frac{1}{2}$	Ari	9 50	L	2 56
87	27	M.	6 35	H	7 05	J	12 30	49	3	2	2 $\frac{1}{2}$	Tau	10 59	M	3 49
88	28	Tu.	6 33	H	7 06	J	12 32	49	4	2 $\frac{3}{4}$	3 $\frac{1}{4}$	Tau	morn	—	4 42
89	29	W.	6 31	H	7 07	J	12 35	49	5	3 $\frac{1}{4}$	4 $\frac{1}{4}$	G'm	12 06	N	5 34
90	30	Th.	6 30	H	7 08	J	12 38	49	6	4 $\frac{1}{2}$	5 $\frac{1}{4}$	G'm	1 07	O	6 26
91	31	Fr.	6 28	H	7 09	J	12 41	48	7	5 $\frac{1}{2}$	6 $\frac{1}{4}$	Cnc	2 03	O	7 16



MARCH hath 31 days.

[1944



Wing-tip and wing-blade are here . . .  
 Now . . . at their mowing,  
 And the old shapes of the year  
 Fall from the heart's knowing:  
 The winter darkness, the fear  
 Are strewn behind this going  
 Of birds that bring, again,  
 More than themselves to men.

D. M.	D. W.	Aspects, Holidays, Heights of High Water, Weather, etc.	Farmer's Calendar.
1	W.	St. David. C. J. Swan d. 1935 $\delta \odot \text{C}$ . $\{ \begin{smallmatrix} 10.0 \\ 8.8 \end{smallmatrix} \}$ A	<p>Start shedding, but hang on to the red flannels. If it turns real warm for a spell, let ma at your back with the cow brush.</p> <p>If you haven't got the old sap house purring by this time, you never will. When you're done sugaring, stack your buckets in a dry place. Clean out all your equipment. Figure now on getting the wood you will need for next sugaring off.</p> <p>This is the best month to split wood. Crows shoot easier now than later on. Check-erberries never taste better than when the snow is just off them. Take the prunings from your heavy blossom branches and put them in a bucket of water in the south window—blossoms for Easter.</p> <p>Look out for grass fires. Burn no rubbish in fields next to your barns. But this is still a good time for burning slash in the woods—if the snow is still plentiful.</p> <p>Don't let your lambs suffer from drafty barns and sudden freezes. "March lambs have a better start, but April lambs bring the best wool."</p> <p>Town meeting. Go there "agin" something, and for something, and say something.</p> <p>No better tonic this time of year than the sun and the wind. January and February are the time for dosing—and dozing.</p>
2	Th.	Pope Leo XIII b. 1810 Houston Day in Texas $\delta \delta \text{C}$ . $\delta \text{hC}$ . $\{ \begin{smallmatrix} 9.5 \\ 8.3 \end{smallmatrix} \}$	
3	Fr.	Str. Nantucket icebound 1907 Tides $\{ \begin{smallmatrix} 9.2 \\ 8.0 \end{smallmatrix} \}$ pleasant	
4	Sa.	Barnum purch. Jumbo 1882 $\text{C}$ runs high. Tides $\{ \begin{smallmatrix} 9.0 \\ 7.9 \end{smallmatrix} \}$ spell.	
5	A	2nd S. in Lent. Seen any crows yet? $\{ \begin{smallmatrix} 9.0 \\ 8.1 \end{smallmatrix} \}$ Windy	
6	M.	Tides $\{ \begin{smallmatrix} 9.1 \\ 8.3 \end{smallmatrix} \}$ and rain.	
7	Tu.	$\delta \text{hC}$ . $\delta \delta \text{h}$ . Tides $\{ \begin{smallmatrix} 9.5 \\ 8.6 \end{smallmatrix} \}$	
8	W.	$\delta$ Gr. Hel. in Apo. Tides $\{ \begin{smallmatrix} 9.4 \\ 8.9 \end{smallmatrix} \}$ Stor-	
9	Th.	Maple sap's runnin'. Tides $\{ \begin{smallmatrix} 9.5 \\ 8.5 \end{smallmatrix} \}$ my.	
10	Fr.	Purim. Blizzard of 1888 $\square \text{hO}$ . $\delta \Psi \text{C}$ . $\{ \begin{smallmatrix} 9.1 \\ 9.6 \end{smallmatrix} \}$	
11	Sa.	Lend Lease ren. 1943 (9.6 billion spent 2 yrs. prev.) $\text{C}$ on Eq. $\{ \begin{smallmatrix} 9.2 \\ 9.6 \end{smallmatrix} \}$	
12	A	3rd S. in Lent. Tides $\{ \begin{smallmatrix} 9.8 \\ 9.4 \end{smallmatrix} \}$ Colder	
13	M.	J. P. Morgan d. 1943 $\square \delta \odot$ . Tides $\{ \begin{smallmatrix} 9.4 \\ 9.2 \end{smallmatrix} \}$	
14	Tu.	Tides $\{ \begin{smallmatrix} 9.3 \\ 8.9 \end{smallmatrix} \}$ Wind 180 mph Mt. Wash. 1943 (10th) and	
15	W.	Income Taxes Payable Tides $\{ \begin{smallmatrix} 9.5 \\ 8.6 \end{smallmatrix} \}$	
16	Th.	Tides $\{ \begin{smallmatrix} 9.3 \\ 8.3 \end{smallmatrix} \}$ clearing.	
17	Fr.	St. Patrick. $\delta \Psi \odot$ Sup. Tides $\{ \begin{smallmatrix} 9.2 \\ 8.2 \end{smallmatrix} \}$	
18	Sa.	1st Eng. bombs on Nazi land targets 1940 (19th) $\text{C}$ runs low. $\{ \begin{smallmatrix} 9.8 \\ 8.2 \end{smallmatrix} \}$	
19	A	4th S. in Lent. Floods Miss. basin 1943 $\{ \begin{smallmatrix} 9.5 \\ 8.5 \end{smallmatrix} \}$ Look	
20	M.	Spring begins. $\odot$ en- $\Psi$ Oreshipp's season $\{ \begin{smallmatrix} 9.8 \\ 9.0 \end{smallmatrix} \}$	
21	Tu.	St. Benedict. Swallows arr. Capistrano, Cal. $\{ \begin{smallmatrix} 10.3 \\ 9.6 \end{smallmatrix} \}$ for	
22	W.	Ens. Warmerdam pole vaults 15-8½ 1943 $\delta \Psi \text{C}$ . $\{ \begin{smallmatrix} 10.8 \\ 10.8 \end{smallmatrix} \}$ an	
23	Th.	$\delta \Psi \odot$ . $\text{C}$ in. Tides $\{ \begin{smallmatrix} 11.2 \\ 10.9 \end{smallmatrix} \}$ easterly	
24	Fr.	$\delta \Psi \text{C}$ . $\text{C}$ in. I saw a Robin $\{ \begin{smallmatrix} 11.5 \\ 11.5 \end{smallmatrix} \}$ storm.	
25	Sa.	Annunc. or Lady Day. Maryland Holiday $\{ \begin{smallmatrix} 11.8 \\ 11.4 \end{smallmatrix} \}$	
26	A	5th S. in Lent. Tides $\{ \begin{smallmatrix} 11.4 \\ 11.1 \end{smallmatrix} \}$	
27	M.	Japan withdrew from League 1935 $\delta$ in $\delta$ . $\{ \begin{smallmatrix} 11.8 \\ 10.6 \end{smallmatrix} \}$ Fine.	
28	Tu.	$\delta$ in Aph. $\delta \delta \text{C}$ . Tides $\{ \begin{smallmatrix} 11.0 \\ 9.9 \end{smallmatrix} \}$	
29	W.	Swedenborg d. 1772 $\delta \text{hC}$ . $\{ \begin{smallmatrix} 10.4 \\ 9.2 \end{smallmatrix} \}$ Possibly	
30	Th.	Sicilian Vespers Holiday O. S. 1282 * Alaska $\delta \delta \text{C}$ . $\{ \begin{smallmatrix} 9.8 \\ 8.6 \end{smallmatrix} \}$	
31	Fr.	$\delta$ in Perl. $\text{C}$ runs high. Tides $\{ \begin{smallmatrix} 9.8 \\ 8.1 \end{smallmatrix} \}$ it rains.	

1944]

APRIL, FOURTH MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.		0 /		Days.		0 /		Days.		0 /		Days.		0 /	
	1	4	N.41	7	6 58	13	9 10	19	11 18	25	13 18	25	13 18	25	13 18	25
2	5	04	8	7 20	14	9 32	20	11 38	26	13 38	26	13 38	26	13 38	26	13 38
3	5	27	9	7 43	15	9 54	21	11 59	27	13 57	27	13 57	27	13 57	27	13 57
4	5	50	10	8 05	16	10 16	22	12 19	28	14 16	28	14 16	28	14 16	28	14 16
5	6	13	11	8 27	17	10 36	23	12 39	29	14 34	29	14 34	29	14 34	29	14 34
6	6	35	12	8 49	18	10 57	24	12 59	30	14 53	30	14 53	30	14 53	30	14 53

- Full Moon, 8th day, 1 h. 22 m., evening, E.
- ☾ Last Quarter, 16th day, 12 h. 59 m., morning, E.
- New Moon, 22nd day, 4 h. 43 m., evening, W.
- ☽ First Quarter, 30th day, 2 h. 06 m., morning, W.

KEY LETTERS REFER TO CORRECTIONS TABLE, PAGE 7, FOR ALL POINTS OUTSIDE NEW ENGLAND.

Day of Year	Day of Month	Day of the Week	☉ Rises. h. m.	☉ Key	☉ Sets. h. m.	☉ Key	Length of Days. h. m.	Sun Slow. m.	Moon's Age	Full Sea, Boston. Morn. h. Even. h.	D's Place	D Sets. h. m.	D Key	D Souths. m.
92	1	Sa.	6 26	H	7 10	J	12 44	48	8	6 $\frac{1}{2}$ 7 $\frac{1}{4}$	Cnc	2 52	O	8 06
93	2	S.	6 25	H	7 11	J	12 47	48	9	7 $\frac{1}{2}$ 8 $\frac{1}{4}$	Cnc	3 35	O	8 53
94	3	M.	6 23	H	7 12	K	12 50	47	10	8 $\frac{1}{2}$ 9	Leo	4 13	N	9 39
95	4	Tu.	6 21	G	7 14	K	12 52	47	11	9 $\frac{1}{4}$ 9 $\frac{3}{4}$	Leo	4 46	M	10 23
96	5	W.	6 19	G	7 15	K	12 55	47	12	10 10 $\frac{1}{2}$	Vir	5 16	L	11 06
97	6	Th.	6 18	G	7 16	K	12 58	46	13	10 $\frac{3}{4}$ 11 $\frac{1}{4}$	Vir	5 43	K	11 48
98	7	Fr.	6 16	G	7 17	K	13 01	46	14	11 $\frac{1}{2}$ 11 $\frac{3}{4}$	Vir	6 09	J	morn
99	8	Sa.	6 14	G	7 18	K	13 04	46	○	— 0	Lib	rises	—	12 31
100	9	S.	6 13	G	7 19	K	13 06	46	16	0 $\frac{1}{2}$ 0 $\frac{3}{4}$	Lib	8 19	K	1 14
101	10	M.	6 11	G	7 20	K	13 09	45	17	1 1 $\frac{1}{4}$	Sco	9 22	L	1 59
102	11	Tu.	6 09	G	7 21	K	13 12	45	18	1 $\frac{1}{2}$ 2	Sco	10 25	M	2 45
103	12	W.	6 08	G	7 23	K	13 15	45	19	2 $\frac{1}{4}$ 2 $\frac{3}{4}$	Sgr	11 28	N	3 34
104	13	Th.	6 06	G	7 24	K	13 18	45	20	3 3 $\frac{1}{2}$	Sgr	morn	—	4 26
105	14	Fr.	6 04	F	7 25	K	13 20	44	21	3 $\frac{3}{4}$ 4 $\frac{1}{2}$	Sgr	12 30	O	5 20
106	15	Sa.	6 03	F	7 26	L	13 23	44	22	4 $\frac{3}{4}$ 5 $\frac{1}{2}$	Cap	1 28	O	6 16
107	16	S.	6 01	F	7 27	L	13 26	44	23	5 $\frac{3}{4}$ 6 $\frac{1}{2}$	Cap	2 21	O	7 13
108	17	M.	6 00	F	7 28	L	13 29	44	24	6 $\frac{3}{4}$ 7 $\frac{1}{2}$	Aqr	3 09	N	8 10
109	18	Tu.	5 58	F	7 29	L	13 31	43	25	7 $\frac{1}{2}$ 8 $\frac{1}{2}$	Aqr	3 51	M	9 06
110	19	W.	5 56	F	7 30	L	13 34	43	26	8 $\frac{1}{4}$ 9 $\frac{1}{2}$	Psc	4 28	K	10 01
111	20	Th.	5 55	F	7 32	L	13 37	43	27	9 $\frac{3}{4}$ 10 $\frac{1}{4}$	Psc	5 02	J	10 55
112	21	Fr.	5 53	F	7 33	L	13 39	43	28	10 $\frac{3}{4}$ 11 $\frac{1}{4}$	Ari	5 35	I	11 48
113	22	Sa.	5 52	F	7 34	L	13 42	42	●	11 $\frac{1}{2}$ —	Ari	sets	—	12 41
114	23	S.	5 50	E	7 35	L	13 45	42	0	0 0 $\frac{1}{2}$	Tau	8 37	M	1 34
115	24	M.	5 49	E	7 36	M	13 47	42	1	0 $\frac{3}{4}$ 1 $\frac{1}{4}$	Tau	9 46	N	2 27
116	25	Tu.	5 47	E	7 37	M	13 50	42	2	1 $\frac{1}{2}$ 2	G'm	10 52	O	3 21
117	26	W.	5 46	E	7 38	M	13 52	42	3	2 $\frac{1}{2}$ 3	G'm	11 52	O	4 15
118	27	Th.	5 44	E	7 39	M	13 55	42	4	3 $\frac{1}{4}$ 3 $\frac{3}{4}$	Cnc	morn	—	5 07
119	28	Fr.	5 43	E	7 41	M	13 57	41	5	4 4 $\frac{3}{4}$	Cnc	12 46	P	5 58
120	29	Sa.	5 42	E	7 42	M	14 00	41	6	5 5 $\frac{1}{2}$	Cnc	1 32	O	6 47
121	30	S.	5 40	E	7 43	M	14 02	41	7	5 $\frac{3}{4}$ 6 $\frac{1}{2}$	Leo	2 13	O	7 34

APRIL hath 30 days.

[1944



Think how . . . and this, so little while ago . . .  
 Earth's face was not a thing to look upon  
 With pleasure . . . It was everywhere a frown:  
 In country places, in the streets of town . . .  
 See, now, in this slow nearing of the sun,  
 Earth smiles, is everywhere a friend we know,  
 In country places, in the quickened street,  
 In faces that we meet.

D. M.	D. W.	Aspects, Holidays, Heights of High Water, Weather, Etc.	Farmer's Calendar.
1	Sa.	All Fools Day. Tides {8.9 7.9	Clear
2	A	Palm S. Sixth in Lent Tides {8.7 7.9	with
3	M.	♄ ♃ ♄. Tides {8.7 8.2	cold
4	Tu.	Hat st les called for plumes 1905 T. J. McCabe d. 1943 Tides {8.8 8.5	in Apo. Tides {8.8 8.5
5	W.	T. J. McCabe d. 1943 Tides {9.0 8.8	winds.
6	Th.	Maundy Army Thursday Day Tides {9.2 9.2	
7	Fr.	Good Friday. ♄ ♃ ♄. ♄ on Eq. Tides {9.4 9.4	
8	Sa.	Pesach Bataan, 1942. Tides {9.5	Warmer
9	A	Easter S. St. Mark. Tides {9.6 9.5	with
10	M.	♄ Gr. H. R. Sears d. L.N. 1943 (8th) Tides {9.8 8.4	rain.
11	Tu.	India rel. Cripps prop. 1942. Tides {9.9 9.2	
12	W.	Holiday in N. Car. ♄ Gr. El. E. Tides {9.9 9.0	Cool.
13	Th.	Thos. Jefferson b. 1748. Hol. in parts of South. Pan-American Day Tides {9.7 8.5	Stat. in R.A. {9.8 8.7
14	Fr.	Swallow Day—running Eastport, Me. Tides {9.8 8.4	Clearing.
15	Sa.	Low S. 1st af. ♄. Geese wing-ing north. Tides {9.5 8.5	
16	A	Hear any peepers? Holiday Louisiana. Ba tie of Lexington, 1775 Gr. Hel. Lat. S. {10.1 10.0	
17	M.	Holiday Me. & Mass. ♄ in Could be Fast Perf. Day in N.H. Texas. ♄ ♃ ♄. ♄ on Eq. Tides {10.9 11.1	now.
18	Tu.	Stat. In R.A. Tides {10.9 11.1	spell
19	W.	2nd S. af. ♄. St. George. ♄ ♃ ♄. Tides {11.4 10.8	
20	Th.	Maple sap's all over. Mark—Major Rogallon Bk. Eng. Holiday—Ala. id. 1694 Ga., Fla., Miss. ♄ ♃ ♄. Tides {11.5 10.5	Showers
21	Fr.	♄ ♃ ♄. Tides {11.8 10.1	
22	Sa.	♄ ♃ ♄. Tides {10.9 9.0	expected.
23	A	♄ ♃ ♄. Tides {10.8 9.5	
24	M.	♄ ♃ ♄. Tides {11.8 10.9	
25	Tu.	♄ ♃ ♄. Tides {10.9 9.5	
26	W.	♄ ♃ ♄. Tides {10.8 9.0	
27	Th.	♄ ♃ ♄. Tides {10.8 9.7	
28	Fr.	♄ ♃ ♄. Tides {9.2 8.2	Fine.
29	Sa.	Tides {9.2 8.2	
30	A	3rd S. a. ♄. ♄ ♃ ♄. Tides {9.7 8.0	

Nobody will want April, 1943 back again.



1944]

MAY, FIFTH MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.		Days.		Days.		Days.		Days.	
	0	'	0	'	0	'	0	'	0	'
1	15	N. 11	7	16 55	13	18 28	19	19 50	25	21 01
2	16	29	8	17 11	14	18 43	20	20 03	26	21 11
3	15	47	9	17 27	15	18 57	21	20 15	27	21 21
4	16	04	10	17 43	16	19 11	22	20 27	28	21 31
5	16	21	11	17 58	17	19 24	23	20 39	29	21 40
6	16	38	12	18 13	18	19 38	24	20 50	30	21 49

- Full Moon, 8th day, 3 h. 28 m., morning, E.
- ☾ Last Quarter, 15th day, 7 h. 12 m., morning, W.
- New Moon, 22nd day, 2 h. 12 m., morning, E.
- ☽ First Quarter, 29th day, 8 h. 06 m., evening, W.

KEY LETTERS REFER TO CORRECTIONS TABLE, PAGE 7, FOR ALL POINTS OUTSIDE NEW ENGLAND.

Day of Year	Day of Month	Day of the Week	☉ Rises. h. m.	☉ Key	☉ Sets. h. m.	☉ Key	Length of Days. h. m.	Sun. Stow. m.	Moon's Arc	Full Sea. Morn. h.	Even. h.	D's Place	D Sets. h. m.	D Key	D Souths h. m.
122	1	M.	5 39	E	7 44	M	14 05	41 8	6 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>2</sub>	Leo	2 47	N	8 19	
123	2	Tu.	5 38	D	7 45	M	14 07	41 9	7 <sup>3</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>2</sub>	Vir	3 18	L	9 03	
124	3	W.	5 36	D	7 46	N	14 10	41 10	8 <sup>3</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>4</sub>	Vir	3 46	K	9 45	
125	4	Th.	5 35	D	7 47	N	14 12	41 11	9 <sup>1</sup> / <sub>2</sub>	9 <sup>3</sup> / <sub>4</sub>	Vir	4 13	J	10 27	
126	5	Fr.	5 34	D	7 48	N	14 15	41 12	10 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>2</sub>	Lib	4 38	I	11 10	
127	6	Sa.	5 32	D	7 49	N	14 17	41 13	11	11 <sup>1</sup> / <sub>4</sub>	Lib	5 04	H	11 54	
128	7	S.	5 31	D	7 50	N	14 19	40 14	11 <sup>1</sup> / <sub>2</sub>	11 <sup>3</sup> / <sub>4</sub>	Scor	5 33	G	morn	
129	8	M.	5 30	D	7 52	N	14 22	40	○	—	0 <sup>1</sup> / <sub>4</sub>	Scor	rises	—	12 41
130	9	Tu.	5 29	D	7 53	N	14 24	40 16	0 <sup>1</sup> / <sub>2</sub>	1	Scor	9 21	N	1 29	
131	10	W.	5 28	D	7 54	N	14 26	40 17	1 <sup>1</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>4</sub>	Sgr	10 24	O	2 21	
132	11	Th.	5 26	D	7 55	N	14 28	40 18	1 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>2</sub>	Sgr	11 25	O	3 16	
133	12	Fr.	5 25	D	7 56	N	14 31	40 19	2 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>4</sub>	Cap	morn	—	4 12	
134	13	Sa.	5 24	C	7 57	O	14 33	40 20	3 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>4</sub>	Cap	12 20	O	5 09	
135	14	S.	5 23	C	7 58	O	14 35	40 21	4 <sup>1</sup> / <sub>4</sub>	5	Aqr	1 09	N	6 06	
136	15	M.	5 22	C	7 59	O	14 37	40 22	5 <sup>1</sup> / <sub>4</sub>	6	Aqr	1 52	M	7 01	
137	16	Tu.	5 21	C	8 00	O	14 39	40 23	6 <sup>1</sup> / <sub>2</sub>	7	Psc	2 29	L	7 55	
138	17	W.	5 20	C	8 01	O	14 41	40 24	7 <sup>1</sup> / <sub>2</sub>	8	Psc	3 03	K	8 48	
139	18	Th.	5 19	C	8 02	O	14 43	40 25	8 <sup>1</sup> / <sub>2</sub>	9	Ari	3 35	I	9 39	
140	19	Fr.	5 18	C	8 03	O	14 45	40 26	9 <sup>1</sup> / <sub>2</sub>	10	Ari	4 06	H	10 30	
141	20	Sa.	5 17	C	8 04	O	14 47	40 27	10 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>	Tau	4 38	G	11 22	
142	21	S.	5 17	C	8 05	O	14 48	40 28	11 <sup>1</sup> / <sub>4</sub>	11 <sup>3</sup> / <sub>4</sub>	Tau	5 13	E	12 14	
143	22	M.	5 16	C	8 06	O	14 50	41	●	—	0 <sup>1</sup> / <sub>4</sub>	Tau	sets	—	1 08
144	23	Tu.	5 15	C	8 07	O	14 52	41 1	0 <sup>1</sup> / <sub>2</sub>	1	G'm	9 38	O	2 02	
145	24	W.	5 14	C	8 08	O	14 54	41 2	1 <sup>1</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>4</sub>	G'm	10 35	P	2 56	
146	25	Th.	5 13	B	8 09	O	14 55	41 3	2	2 <sup>1</sup> / <sub>2</sub>	Cnc	11 26	O	3 48	
147	26	Fr.	5 13	B	8 10	P	14 57	41 4	2 <sup>3</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>4</sub>	Cnc	morn	—	4 39	
148	27	Sa.	5 12	B	8 10	P	14 58	41 5	3 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>4</sub>	Leo	12 10	O	5 28	
149	28	S.	5 11	B	8 11	P	15 00	41 6	4 <sup>1</sup> / <sub>4</sub>	5	Leo	12 47	N	6 14	
150	29	M.	5 11	B	8 12	P	15 01	41 7	5 <sup>1</sup> / <sub>4</sub>	5 <sup>3</sup> / <sub>4</sub>	Leo	1 20	M	6 58	
151	30	Tu.	5 10	B	8 13	P	15 03	41 8	6	6 <sup>3</sup> / <sub>4</sub>	Vir	1 49	L	7 41	
152	31	W.	5 10	B	8 14	P	15 04	42 9	7	7 <sup>1</sup> / <sub>2</sub>	Vir	2 15	K	8 23	

MAY bath 31 days.

[1944



Such brave, immoderate shining is here now,  
Whitening the orchard hill, the singular tree,  
Obscuring the black shape, the angular bough, . .  
The mind must ponder what it means to be  
So strong in secret self there is enough  
Of strength for this unhoarded waste of love.

D. M.	D. W.	Aspects, Holidays, Heights of High Water, Weather, etc.	Farmer's Calendar.
1	M.	St. Philip & St. James. Coal strike 1943	8.5 8.1
2	Tu.	♂ ☽ ☉ Int. ☾ in Ado. Tides	8.4 8.8
3	W.	Invention of the Cross. Tides	8.5 8.7
4	Th.	♂ ☽ ☉ ♀ in ☽. Holiday Rhode Island.	8.7 9.1
5	Fr.	Mackerel for sale. ☾ on Eq. Tides	8.9 9.4
6	Sa.	Corregidor, 1942. Tides	9.1 9.8
7	A	4th S. a. Ea. Tunis 1943 Tides	9.2 10.0
8	M.	Am. Bible Soc. id. 1816. ☐ ☽ ☉. spell	9.4
9	Tu.	Scup off the Vineyard. Tides	10.2 9.4
10	W.	San Francisco fire, 1851. N. Car., S. Car. Holiday.	10.4 9.8
11	Th.	"Man without a Country" d. 1863. ♂ ☽ ♀. colder.	10.4 9.2
12	Fr.	☾ runs low. Tides	10.8 9.0
13	Sa.	Boston Transcript "folded" (14th, 1941). Tides	10.2 8.9
14	A	Bog. S. Mother's Day. ♀ in Stat. in R.A.	10.0 8.9
15	M.	Minor Cleveland clinic hosp. fire, 1929. Tides	9.8 9.0
16	Tu.	rogation Tides	9.7 9.3
17	W.	days. Burma monsoon begins. ☾ in Perl.	9.7 9.7
18	Th.	Ascension Day. ☾ on Eq. full	10.3
19	Fr.	Dark Day, 1780. Tides	10.0 10.8
20	Sa.	Haking season, Me. coast. Holiday, N. Car. ♂ ☽ ☾. moon.	10.1 11.1
21	A	Sun. a. As. ♂ ☽ ☾. Unsettled	11.2
22	M.	Coffee 1st used, England, 1652. ♂ ☾ ☾. weather	10.1
23	Tu.	Mexico decl. war (22), 1942. ♂ ☽ ☾. Tides	11.3 9.9
24	W.	Tides 11.1 d. 9.8 M. Kopernik d. 1943 now	11.1 9.8
25	Th.	Argentine Indep. Day. ☾ runs high. Tides	10.7 9.2
26	Fr.	Unlimited Emergency, U.S., 1941 (27th). ♂ ☽ ☾.	10.2 8.8
27	Sa.	Quints born, 1934 (28th). Tides	9.7 8.5
28	A	Whit S. Pentecost Shevuoth ♂ ☽ ☾. Tides	9.2 8.3
29	M.	♀ Gr. El. W. Tides	8.7 8.3
30	Tu.	Memor. Holiday exc. tal Day. cert. So. States. ♂ ☾ ☉. ☾ on Apo.	8.4 8.3
31	W.	Johnstown Flood, 1889. ♂ ☽ ☾. ♂ ☽ ☾.	8.8 8.5

Your garden should be under way now—beans, carrots, parsnips and tomato plants. Your early peas, if the season has been kind, are showing progress.

The pigs can take care of the last of the turnips and carrots that are sprouting in the cold cellar.

As the month comes in watch the apple blossoms swell, and as it goes out, look for first signs of caterpillars on your fruit trees and on wild cherries. Apply apple sprays, the pre-pink and the pink. An ounce of prevention is worth a pound of cure. For your pre-pink (when the buds are rabbit-eared), a good mixture is two gallons of liquid sulphur in 100 gallons of water (for scab), with two or three pounds of arsenate of lead added (for caterpillars and other chewing insects), and eight pounds of hydrated lime (to prevent burning).

For pink spray (when buds show pink) use the same formula. It is a good plan to add a small amount of nicotine— $\frac{3}{4}$  of a pint to 100 gallons.

Handle tent caterpillars by direct methods. Get out your tallest ladder and pull the nest off the trees. Best time for this is dusk and early morning when the varmints are in their nests. Squash them between gloves or under your heel.

Pasture fences won't wait fixing much longer.



1944]

JUNE, SIXTH MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.		0	/	Days.		0	/	Days.		0	/	Days.		0	/	Days.		0	/		
	1	22			7	22			13	23			19	23			25	23			23	
	1	22	N.06		7	22	47		13	23	14		19	23	26		25	23	23		23	23
	2	22	14		8	22	53		14	23	17		20	23	26		26	23	21		23	21
	3	22	21		9	22	58		15	23	20		21	23	27		27	23	19		23	19
	4	22	28		10	23	02		16	23	22		22	23	26		28	23	16		23	16
	5	22	35		11	23	07		17	23	24		23	23	26		29	23	13		23	13
	6	22	41		12	23	11		18	23	25		24	23	25		30	23	09		23	09

- Full Moon, 6th day, 2 h. 58 m., evening, E.
- ☾ Last Quarter, 13th day, 11 h. 56 m., morning, W.
- New Moon, 20th day, 1 h. 00 m., evening, W.
- ☽ First Quarter, 28th day, 1 h. 27 m., evening, E.

KEY LETTERS REFER TO CORRECTIONS TABLE, PAGE 7, FOR ALL POINTS OUTSIDE NEW ENGLAND.

Day of Year	Day of Month	Day of the Week	☉		Key	☾		Key	Length of Days.	Sun p. Slow.	Moon's Age	Full Sea, Boston.		D's Place	D Sets.	Key	D Souths.
			Rises. m.	Key		Sets. m.	Key					Morn. h.	Even h.				
153	1	Th.	5 09	B	8 15	P	15 05	42 10	8	8 1/2	Lib	2 41	J	9 05			
154	2	Fr.	5 09	B	8 15	P	15 07	42 11	8 3/4	9 1/4	Lib	3 06	I	9 48			
155	3	Sa.	5 08	B	8 16	P	15 08	42 12	9 1/2	10	Lib	3 33	G	10 33			
156	4	S.	5 08	B	8 17	P	15 09	42 13	10 1/4	10 1/2	Scor	4 02	F	11 21			
157	5	M.	5 08	B	8 17	P	15 10	42 14	11	11 1/4	Scor	4 35	E	morn			
158	6	Tu.	5 07	B	8 18	P	15 11	43 0	11 3/4	—	Sgr	rises	—	12 12			
159	7	W.	5 07	B	8 19	P	15 12	43 16	0	0 1/2	Sgr	9 16	O	1 07			
160	8	Th.	5 07	B	8 19	P	15 13	43 17	0 3/4	1 1/4	Cap	10 15	O	2 04			
161	9	Fr.	5 06	B	8 20	P	15 14	43 18	1 1/2	2 1/4	Cap	11 08	O	3 02			
162	10	Sa.	5 06	B	8 21	P	15 14	43 19	2 1/4	3	Aqr	11 53	N	4 01			
163	11	S.	5 06	B	8 21	P	15 15	43 20	3 1/4	3 3/4	Aqr	morn	—	4 58			
164	12	M.	5 06	B	8 22	P	15 15	44 21	4	4 3/4	Psc	12 33	L	5 52			
165	13	Tu.	5 06	B	8 22	P	15 16	44 22	5	5 3/4	Psc	1 07	K	6 45			
166	14	W.	5 06	B	8 22	P	15 17	44 23	6	6 3/4	Psc	1 39	J	7 36			
167	15	Th.	5 06	A	8 23	P	15 17	44 24	7 1/4	7 1/4	Ari	2 09	I	8 26			
168	16	Fr.	5 06	A	8 23	P	15 17	45 25	8 1/4	8 3/4	Ari	2 40	G	9 16			
169	17	Sa.	5 06	A	8 24	P	15 18	45 26	9 1/4	9 3/4	Tau	3 12	F	10 07			
170	18	S.	5 06	A	8 24	P	15 18	45 27	10 1/4	10 1/2	Tau	3 47	E	10 59			
171	19	M.	5 06	A	8 24	P	15 18	45 28	11	11 1/4	G'm	4 25	C	11 52			
172	20	Tu.	5 06	A	8 24	P	15 18	45 ●	—	0	G'm	sets	—	12 45			
173	21	W.	5 07	A	8 25	P	15 18	46 0	0	0 3/4	Cnc	9 18	P	1 38			
174	22	Th.	5 07	A	8 25	P	15 18	46 1	0 3/4	1 1/2	Cnc	10 05	O	2 30			
175	23	Fr.	5 07	A	8 25	P	15 18	46 2	1 1/2	2 1/4	Cnc	10 45	O	3 20			
176	24	Sa.	5 07	A	8 25	P	15 18	46 3	2 1/4	2 3/4	Leo	11 20	N	4 07			
177	25	S.	5 08	A	8 25	P	15 18	46 4	3	3 3/4	Leo	11 50	L	4 53			
178	26	M.	5 08	A	8 25	P	15 17	47 5	3 3/4	4 1/2	Vir	morn	—	5 36			
179	27	Tu.	5 08	A	8 25	P	15 17	47 6	4 1/2	5 1/4	Vir	12 18	K	6 18			
180	28	W.	5 09	B	8 25	P	15 16	47 7	5 1/2	6	Vir	12 43	J	7 00			
181	29	Th.	5 09	B	8 25	P	15 16	47 8	6 1/4	6 3/4	Lib	1 09	I	7 42			
182	30	Fr.	5 10	B	8 25	P	15 15	47 9	7 1/4	7 3/4	Lib	1 34	H	8 25			



Who would believe, beneath this indolence  
Of summer fields, now drowsing in the sun,  
What hid, wild storm is raging, what intense  
And intricate lusts, what nameless deeds are done,  
That the tall wheat, all golden and grave and fair,  
Might sway in the sun, write grace upon the air.

D. M.	D. W.	Aspects, Holidays, Heights of High Water, Weather, etc.	Farmer's Calendar.
1	Th.	Nicomede. ☾ <sup>on</sup> Bq. Tides {8.3 8.8	Now
2	Fr.	Dutch Harbor bombed, 1942. Tides {8.5 9.2	comes
3	Sa.	Holiday in South (part of). Tides {8.7 9.6	some
4	A	Trinity Sun. ☿ Gr. Hel. {8.9 Lat. S. {10.0	real
5	M.	Battle of Midway, 1942. (to 10th) ☿ ♀ ♂ Tides {9.1 10.4	
6	Tu.	Tides {9.8 9.4	Kermit Roosevelt d. 1943 (4th) weather.
7	W.	Tides {10.7 9.4	Rain
8	Th.	Corpus Christi. 1932. ☾ <sup>runs</sup> low. Tides {10.9 9.5	is
9	Fr.	Laurel blooms. Tides {11.0 9.5	expected.
10	Sa.	Boston Marine Soc. id. 1742 Tides {10.9 9.5	
11	A	1st. S. af. T. St. Barnabas. ☾ in 10.7 Peri. {9.5	
12	M.	Winter beg. in New Zealand. ♀ In R.A. {10.4 9.5	Thunder
13	Tu.	McArthur Day. Tides {10.0 9.6	then
14	W.	Flag Day. ☾ on Eq. Tides {9.7 9.7	seasonable
15	Th.	St. Bernard. Holiday Idaho. ♀ in ♀. {9.5 10.0	
16	Fr.	Tides {9.4 0.3	A. Bushnell d. 1943 weather for
17	Sa.	Battle Bunker Hill, 1775. ☿ ♀ ♂. {9.4 10.6	all
18	A	2nd. S. af. T. Father's Day. {9.5 10.8	crops.
19	M.	Tobruk fell to Rommel, 1942. ☿ ♂ ☾. ☿ ♀ ☾. {9.5 10.9	
20	Tu.	but soon fell back again. ☿ ♀ ☾. ☿ ♀ ☾. {9.4 10.4	A
21	W.	SUMMER BEGINS. ☾ ent. ☾. ☿ ♀ ☾. ☾ runs high {10.9 9.3	
22	Th.	Hitler in Russia, 1941 ☿ ♀ ♀. 10.7 9.2 [21 <sup>st</sup> {10.9 9.3	
23	Fr.	[22 <sup>nd</sup> ☾ ♀ ☾]. ♀ in ♀. Tides {10.4 9.0	
24	Sa.	St. John Baptist born. ☿ ♂ ☾. ☿ ♀ ☾. {10.1 8.9	
25	A	3rd. S. af. T. tides {9.7 8.7	hot spell.
26	M.	Brigham Young murd. 1844 (27th). {9.2 8.6	Cooler
27	Tu.	E. Bartlett (pear) d. 1860 ☿ ♀ ☾. ☿ ♀ ☾. ♀ in Peri {9.5 8.5	
28	W.	☾ on Eq. {8.5 8.6	[27 <sup>th</sup> ☿ ♀ ☾. ☾ in Apo. {8.8 8.5
29	Th.	St. Peter & St. Paul. Tides {8.3 8.7	and
30	Fr.	Darned chilly month, 1897. Tides {8.2 8.9	rain.

This is the month for bees — the heavy, sweet month — with much of the promise and the failure of the crop year in it. Discount your apple blossoms in late May or June unless the weather is right for the bees to pollinate. Damp and stormy weather may quarter your possible crop.

Now is the time for a good weeding in the gardens. Weeds pull more easily after a rain, but get them out of the garden fast. They root if piled or are scattered between rows. Weeds hoed in the hot sun will be killed. Thin your garden stuff now. You will get twice the yield if you do.

Start that compost heap. See your finished heap not more than six feet long and four feet wide. Start the bottom layer with coarse, long-fibred matter such as poke weed (well cut up) or, later on, corn stalks. On this generous layer put good fresh manure of any kind to the depth of three or four inches. Then pile on lawn cuttings and any disease free vegetable cuttings (no weeds). Sprinkle with agricultural lime, bonemeal or commercial fertilizer. Repeat the process with alternate layers as described. The heap should not be over five feet high, with a concave center, to catch and hold moisture. Heap should be ready for fall use.

Hail shells fell at Silver Lake, N. H. June 28, 1942.

This month's always the weather vane for the summer. Summer copies June.

1944]

## JULY, SEVENTH MONTH.

## ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.			Days.			Days.			Days.			Days.		
	0	/		0	/		0	/		0	/		0	/	
1	23	N.	05	7	22	33	13	21	47	19	20	47	25	19	35
2	23		01	8	22	27	14	21	38	20	20	36	26	19	22
3	22		56	9	22	19	15	21	29	21	20	25	27	19	09
4	22		51	10	22	12	16	21	19	22	20	13	28	18	55
5	22		46	11	22	04	17	21	09	23	20	01	29	18	41
6	22		40	12	21	56	18	20	58	24	19	48	30	18	26

○ Full Moon, 6th day, 0 h. 27 m., morning, W.

☾ Last Quarter, 12th day, 4 h. 39 m., evening, W.

● New Moon, 20th day, 1 h. 42 m., morning, E.

☽ First Quarter, 28th day, 5 h. 23 m., morning, W.

KEY LETTERS REFER TO CORRECTIONS TABLE, PAGE 7, FOR ALL POINTS OUTSIDE NEW ENGLAND.

Day of Year	Day of Month	Day of the week	☉		Key	☽		Key	Length of Days.		Sun Slow.	Moon's Age	Full Sea, Boston.		D's Place	☽		Key	☽	
			Rises.	h. m.		Sets.	h. m.		h.	m.			Morn.	Even.		h.	m.		Sets.	h. m.
183	1	Sa.	5	10	B	8	25	P	15	15	48	10	8	8 $\frac{1}{2}$	Sco	2	01	G	9	11
184	2	S.	5	11	B	8	25	P	15	14	48	11	9	9 $\frac{1}{4}$	Sco	2	32	F	10	01
185	3	M.	5	11	B	8	25	P	15	13	48	12	9 $\frac{3}{4}$	10	Sgr	3	07	D	10	53
186	4	Tu.	5	12	B	8	24	P	15	12	48	13	10 $\frac{1}{2}$	10 $\frac{3}{4}$	Sgr	3	48	C	11	50
187	5	W.	5	13	B	8	24	P	15	12	48	14	11 $\frac{1}{2}$	11 $\frac{1}{2}$	Sgr	4	38	C	morn	
188	6	Th.	5	13	B	8	24	P	15	11	49	○	—	0 $\frac{1}{4}$	Cap	rises	—		12	49
189	7	Fr.	5	14	B	8	23	P	15	10	49	16	0 $\frac{1}{2}$	1	Cap	9	50	N	1	49
190	8	Sa.	5	15	B	8	23	P	15	09	49	17	1 $\frac{1}{4}$	1 $\frac{3}{4}$	Aqr	10	32	M	2	49
191	9	S.	5	15	B	8	23	P	15	07	49	18	2	2 $\frac{3}{4}$	Aqr	11	09	L	3	46
192	10	M.	5	16	B	8	22	P	15	06	49	19	3	3 $\frac{1}{2}$	Psc	11	42	J	4	41
193	11	Tu.	5	17	B	8	22	P	15	05	49	20	3 $\frac{3}{4}$	4 $\frac{1}{2}$	Psc	morn	—		5	33
194	12	W.	5	17	B	8	21	P	15	04	49	21	4 $\frac{1}{4}$	5 $\frac{1}{2}$	Ari	12	13	I	6	24
195	13	Th.	5	18	B	8	21	P	15	02	50	22	5 $\frac{3}{4}$	6 $\frac{1}{2}$	Ari	12	44	H	7	14
196	14	Fr.	5	19	B	8	20	P	15	01	50	23	6 $\frac{3}{4}$	7 $\frac{1}{2}$	Tau	1	15	F	8	04
197	15	Sa.	5	20	B	8	19	P	15	00	50	24	8	8 $\frac{1}{2}$	Tau	1	48	E	8	54
198	16	S.	5	21	B	8	19	P	14	58	50	25	9	9 $\frac{1}{4}$	G'm	2	25	D	9	46
199	17	M.	5	22	B	8	18	P	14	57	50	26	10	10 $\frac{1}{4}$	G'm	3	06	C	10	38
200	18	Tu.	5	22	B	8	17	O	14	55	50	27	10 $\frac{3}{4}$	11	Cnc	3	52	B	11	31
201	19	W.	5	23	B	8	17	O	14	53	50	28	11 $\frac{3}{4}$	11 $\frac{3}{4}$	Cnc	4	43	B	12	23
202	20	Th.	5	24	C	8	16	O	14	52	50	●	—	0 $\frac{1}{4}$	Cnc	sets	—		1	13
203	21	Fr.	5	25	C	8	15	O	14	50	50	1	0 $\frac{1}{2}$	1	Leo	9	19	N	2	02
204	22	Sa.	5	26	C	8	14	O	14	48	50	2	1 $\frac{1}{4}$	1 $\frac{3}{4}$	Leo	9	52	M	2	48
205	23	S.	5	27	C	8	13	O	14	46	50	3	1 $\frac{3}{4}$	2 $\frac{1}{2}$	Vir	10	20	L	3	32
206	24	M.	5	28	C	8	12	O	14	44	50	4	2 $\frac{1}{2}$	3	Vir	10	46	K	4	14
207	25	Tu.	5	29	C	8	11	O	14	42	50	5	3 $\frac{1}{4}$	3 $\frac{3}{4}$	Vir	11	11	I	4	56
208	26	W.	5	30	C	8	10	O	14	41	50	6	4	4 $\frac{1}{2}$	Lib	11	36	H	5	37
209	27	Th.	5	31	C	8	09	O	14	39	50	7	4 $\frac{3}{4}$	5 $\frac{1}{4}$	Lib	morn	—		6	19
210	28	Fr.	5	32	C	8	08	O	14	37	50	8	5 $\frac{1}{2}$	6	Sco	12	02	G	7	03
211	29	Sa.	5	33	C	8	07	O	14	35	50	9	6 $\frac{1}{2}$	7	Sco	12	30	F	7	50
212	30	S.	5	34	C	8	06	O	14	32	50	10	7 $\frac{1}{2}$	7 $\frac{3}{4}$	Sco	1	02	E	8	40
213	31	M.	5	35	D	8	05	N	14	30	50	11	8 $\frac{1}{4}$	8 $\frac{3}{4}$	Sgr	1	39	D	9	34



JULY hath 31 days.

[1944



"Summer," we say . . . and "summer" . . . loving the word,  
 The sound, the sense, the meaning beyond both,  
 Wherein bird-song is heard, leaf-kiss is heard . . .  
 "Summer" . . . again . . . and "summer" . . . being both  
 The end the syllables that bring the slow,  
 Sweet indolent days about us where we go.

D. M.	D. W.	Aspects, Holidays, Heights of High Water, Weather, etc.	Farmer's Calendar.
1	Sa.	Saloons closed R. I., 1886 $\delta\psi\circ$ Sup. $\{ \begin{matrix} 8.8 \\ 9.2 \end{matrix} \}$ Fog	
2	A	4th S. af. Tr. $\delta\psi\psi$ $\{ \begin{matrix} 9.4 \\ 9.6 \end{matrix} \}$ along	Don't let your grass get too ripe. Past bloom it becomes woody and loses much of its nourishment and savor. The first of the month is not too late to sow millet. Your corn needs cultivating and the sooner haying is done with the better.
3	M.	1st U.S. bombers raid Europe (Am. crews), 1942. $\oplus$ Aph. $\{ \begin{matrix} 8.7 \\ 10.1 \end{matrix} \}$	Pastures will begin to show results of heavy browsing. Change pastures frequently now. Stock left too long on thin feed will look to green fields beyond and break out of the best fence. Be sure there is plenty of good fresh water for your stock at all times.
4	Tu.	INDEPENDENCE DAY Tides $\{ \begin{matrix} 9.0 \\ 10.6 \end{matrix} \}$ coast.	You may start now thinning out your apples and pears where the fruit is overcrowded. Mulch fruit trees with hay or sawdust.
5	W.	Sir Wm. Pepperell d. 1759. $\delta\delta\psi$ $\{ \begin{matrix} 9.8 \\ 11.0 \end{matrix} \}$ runs low.	Poultry should have plenty of outside pen space, and occasionally let them run as they will through the orchard. These hot days are the worst of the year for lice and red mite, so clean your hen house often and paint the roosts with nicotine.
6	Th.	Tides $\{ \begin{matrix} 9.6 \\ \end{matrix} \}$ Hot spell	When the water is pouring off you in the hayfield, get the women-folk to bring out a gallon of oatmeal water—two handfuls of oatmeal with Adams Ale from the spring. And there's nothing better to quench thirst and stay by you than a half gallon of buttermilk (just on the turn to sour) and a half gallon of water. Rum and hay don't mix.
7	Fr.	40° below Little America. $\psi$ Gr. Hel. Lat. N. Tides $\{ \begin{matrix} 11.3 \\ 9.9 \end{matrix} \}$ is	
8	Sa.	The Three Weeks. $\psi$ In Peri. Tides $\{ \begin{matrix} 11.5 \\ 10.1 \end{matrix} \}$ due.	
9	A	5th S. a. Tr. Tides $\{ \begin{matrix} 11.4 \\ 10.2 \end{matrix} \}$ Thunder	
10	M.	Columbus b. 1447. Tides $\{ \begin{matrix} 11.2 \\ 10.2 \end{matrix} \}$ Showers	
11	Tu.	Dr. F. Schlesinger d. 1943 Tides $\{ \begin{matrix} 10.7 \\ 10.2 \end{matrix} \}$ making.	
12	W.	Thoreau b. 1817. $\psi$ on Eq. Tides $\{ \begin{matrix} 10.2 \\ 10.1 \end{matrix} \}$	
13	Th.	Holiday. Mrs. Perry, of Keene, Tenn. N. H., 105 (19th) '43 $\{ \begin{matrix} 9.7 \\ 10.1 \end{matrix} \}$	
14	Fr.	St. Swithin Bastille Day. Tides $\{ \begin{matrix} 8.8 \\ 10.1 \end{matrix} \}$	
15	Sa.	Tides $\{ \begin{matrix} 9.0 \\ 10.1 \end{matrix} \}$ Good haying	
16	A	6th S. a. Tr. $\delta\delta\psi$ Tides $\{ \begin{matrix} 8.9 \\ 10.8 \end{matrix} \}$ and	
17	M.	Holiday Puerto Rico. Tides $\{ \begin{matrix} 8.9 \\ 10.4 \end{matrix} \}$ seasonable	
18	Tu.	Mohamet d. 634. $\delta\psi\psi$ $\{ \begin{matrix} 9.0 \\ 10.5 \end{matrix} \}$ runs high	
19	W.	Dog days begin—Hl. Sirius! Tides $\{ \begin{matrix} 9.0 \\ 10.4 \end{matrix} \}$ weather.	
20	Th.	St. Margaret. $\psi$ An. Ecl. $\delta\psi\psi$ Tides $\{ \begin{matrix} 9.1 \\ \end{matrix} \}$	
21	Fr.	$\delta\psi\psi$ Tides $\{ \begin{matrix} 10.4 \\ 9.1 \end{matrix} \}$ A rain	
22	Sa.	St. Mary Magdalene. $\delta\psi\psi$ Tides $\{ \begin{matrix} 10.2 \\ 9.1 \end{matrix} \}$	
23	A	7th S. af. Tr. $\delta\delta\psi$ Tides $\{ \begin{matrix} 10.0 \\ 9.0 \end{matrix} \}$ is	
24	M.	Mussolini Res. 1943 $\psi$ in Apo. Tides $\{ \begin{matrix} 9.7 \\ 9.0 \end{matrix} \}$ due.	
25	Tu.	St. James. Haegg mite 4:05.3 $\delta\psi\psi$ $\{ \begin{matrix} 9.8 \\ 8.9 \end{matrix} \}$	
26	W.	St. Anne. $\psi$ on Eq. Tides $\{ \begin{matrix} 9.0 \\ 8.8 \end{matrix} \}$ Cooler	
27	Th.	Rostov Holiday 1942. Puerto Rico. Tides $\{ \begin{matrix} 8.6 \\ 8.8 \end{matrix} \}$ and	
28	Fr.	Goodbye, Robespierre, 1794. Tides $\{ \begin{matrix} 8.8 \\ 8.8 \end{matrix} \}$ look	
29	Sa.	$\delta\psi\psi$ E. Bowle d. 1943 Tides $\{ \begin{matrix} 8.2 \\ 9.0 \end{matrix} \}$ for	
30	A	8th S. af. Tr. Tides $\{ \begin{matrix} 8.1 \\ 9.2 \end{matrix} \}$ rain.	
31	M.	Lights out, Sandy Hook (30th) 1942. $\psi$ in $\psi$ . $\{ \begin{matrix} 8.8 \\ 9.6 \end{matrix} \}$	

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AUGUST, EIGHTH MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.		0 /		Days.		0 /		Days.		0 /		Days.		0 /	
		1	17	N.	56	7	16	20	13	14	34	19	12	40	25	16
	2	17		41	8	16	03	14	14	16	20	12	20	26	10	18
	3	17		25	9	15	46	15	13	57	21	12	00	27	9	57
	4	17		09	10	15	28	16	13	38	22	11	40	28	9	36
	5	16		52	11	15	11	17	13	19	23	11	20	29	9	15
	6	16		37	12	14	53	18	13	00	24	11	00	30	8	53

○ Full Moon, 4th day, 8 h. 39 m., morning, W.

☾ Last Quarter, 10th day, 10 h. 52 m., evening, E.

● New Moon, 18th day, 4 h. 25 m., evening, W.

☽ First Quarter, 26th day, 7 h. 39 m., evening, W.

KEY LETTERS REFER TO CORRECTIONS TABLE, PAGE 7, FOR ALL POINTS OUTSIDE NEW ENGLAND.

Day of Year	Day of Month	Day of the Week	☉ Rises p. m.	Key	☉ Sets. p. m.	Key	Length of Days. h. m.	Sun n. Slow.	Moon's Age	Full Sea, Boston.		D's Place	D Sets. h. m.	Key	D Souths. h. m.
										Morn h.	Even h.				
214	1	Tu.	5 36	D	8 04	N	14 28	50	12	9 1 <sup>4</sup> / <sub>4</sub>	9 1 <sup>2</sup> / <sub>2</sub>	Sgr	2 24	C	10 31
215	2	W.	5 37	D	8 03	N	14 26	50	13	10 1 <sup>4</sup> / <sub>4</sub>	10 1 <sup>4</sup> / <sub>4</sub>	Cap	3 18	C	11 31
216	3	Th.	5 38	D	8 02	N	14 24	50	14	11 1 <sup>4</sup> / <sub>4</sub>	11 1 <sup>4</sup> / <sub>4</sub>	Cap	4 20	C	morn
217	4	Fr.	5 39	D	8 00	N	14 21	50	○	11 3 <sup>4</sup> / <sub>4</sub>	—	Aqr	rises	—	12 32
218	5	Sa.	5 40	D	7 59	N	14 19	50	16	0	0 1 <sup>2</sup> / <sub>2</sub>	Aqr	9 05	L	1 32
219	6	S.	5 41	D	7 58	N	14 17	50	17	1	1 1 <sup>2</sup> / <sub>2</sub>	Psc	9 41	K	2 29
220	7	M.	5 42	D	7 56	N	14 15	50	18	1 3 <sup>4</sup> / <sub>4</sub>	2 1 <sup>4</sup> / <sub>4</sub>	Psc	10 14	I	3 25
221	8	Tu.	5 43	D	7 55	N	14 12	50	19	2 3 <sup>4</sup> / <sub>4</sub>	3 1 <sup>4</sup> / <sub>4</sub>	Ari	10 46	H	4 18
222	9	W.	5 44	D	7 54	N	14 10	49	20	3 1 <sup>2</sup> / <sub>2</sub>	4	Ari	11 17	G	5 10
223	10	Th.	5 45	D	7 53	M	14 07	49	21	4 1 <sup>2</sup> / <sub>2</sub>	5	Tau	11 50	E	6 01
224	11	Fr.	5 46	E	7 51	M	14 05	49	22	5 1 <sup>2</sup> / <sub>2</sub>	6	Tau	morn	—	6 52
225	12	Sa.	5 47	E	7 50	M	14 02	49	23	6 1 <sup>2</sup> / <sub>2</sub>	7	G'm	12 26	D	7 43
226	13	S.	5 48	E	7 48	M	14 00	49	24	7 1 <sup>2</sup> / <sub>2</sub>	8	G'm	1 05	C	8 34
227	14	M.	5 49	E	7 47	M	13 58	49	25	8 3 <sup>4</sup> / <sub>4</sub>	9	G'm	1 50	B	9 27
228	15	Tu.	5 50	E	7 46	M	13 55	48	26	9 3 <sup>4</sup> / <sub>4</sub>	10	Cnc	2 39	B	10 19
229	16	W.	5 52	E	7 44	M	13 52	48	27	10 3 <sup>4</sup> / <sub>4</sub>	10 3 <sup>4</sup> / <sub>4</sub>	Cnc	3 33	B	11 09
230	17	Th.	5 53	E	7 43	M	13 50	48	28	11 1 <sup>4</sup> / <sub>4</sub>	11 1 <sup>4</sup> / <sub>4</sub>	Leo	4 29	C	11 58
231	18	Fr.	5 54	E	7 41	M	13 47	48	●	—	0	Leo	sets	—	12 44
232	19	Sa.	5 55	E	7 39	M	13 45	48	0	0 1 <sup>4</sup> / <sub>4</sub>	0 1 <sup>2</sup> / <sub>2</sub>	Leo	8 23	L	1 29
233	20	S.	5 56	E	7 38	L	13 42	47	1	0 3 <sup>4</sup> / <sub>4</sub>	1 1 <sup>4</sup> / <sub>4</sub>	Vir	8 49	K	2 12
234	21	M.	5 57	F	7 36	L	13 40	47	2	1 1 <sup>2</sup> / <sub>2</sub>	1 3 <sup>4</sup> / <sub>4</sub>	Vir	9 15	J	2 54
235	22	Tu.	5 58	F	7 35	L	13 37	47	3	2	2 1 <sup>2</sup> / <sub>2</sub>	Lib	9 39	I	3 35
236	23	W.	5 59	F	7 33	L	13 34	47	4	2 3 <sup>4</sup> / <sub>4</sub>	3 1 <sup>4</sup> / <sub>4</sub>	Lib	10 05	H	4 16
237	24	Th.	6 00	F	7 32	L	13 32	46	5	3 1 <sup>2</sup> / <sub>2</sub>	3 3 <sup>4</sup> / <sub>4</sub>	Lib	10 31	G	4 59
238	25	Fr.	6 01	F	7 30	L	13 29	46	6	4 1 <sup>4</sup> / <sub>4</sub>	4 1 <sup>2</sup> / <sub>2</sub>	Scor	11 00	E	5 44
239	26	Sa.	6 02	F	7 28	L	13 26	46	7	5	5 1 <sup>4</sup> / <sub>4</sub>	Scor	11 34	D	6 31
240	27	S.	6 03	F	7 27	L	13 23	45	8	5 3 <sup>4</sup> / <sub>4</sub>	6 1 <sup>4</sup> / <sub>4</sub>	Sgr	morn	—	7 22
241	28	M.	6 04	F	7 25	L	13 21	45	9	6 3 <sup>4</sup> / <sub>4</sub>	7 1 <sup>4</sup> / <sub>4</sub>	Sgr	12 15	C	8 16
242	29	Tu.	6 05	F	7 23	K	13 18	45	10	7 3 <sup>4</sup> / <sub>4</sub>	8	Cap	1 03	C	9 13
243	30	W.	6 06	G	7 22	K	13 15	45	11	8 3 <sup>4</sup> / <sub>4</sub>	9	Cap	2 00	C	10 13
244	31	Th.	6 08	G	7 20	K	13 13	44	12	9 3 <sup>4</sup> / <sub>4</sub>	10	Cap	3 05	C	11 12

AUGUST hath 31 days.

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From weed . . . to flower . . . to weed,  
The butterfly  
Cruises the drowsy air, . .  
And I,  
From some old need  
Of casual indolence, am there,  
Adrift from all intent,  
Cruising from weed to flower,  
Careless of what is meant  
. . . If anything . . . by this slow, summer hour.

D.M.	D.W.	Aspects, Holidays, Heights of High Water, Weather, etc.	Farmer's Calendar.
1	Tu.	Lammas Day. Holiday Colorado. { 8.8 10.2	Sticky
2	W.	Myrna Loy born. C runs low. { 9.0 10.8	weather.
3	Th.	St. Stephen. Tides { 9.5 11.8	
4	Fr.	"Liberty Tree". Coast Guard cut down 1775. Day. Tides { 10.0 11.6	
5	Sa.	Henderson Field capt. 1942 (7th). C in. Perl. { 10.4 11.8	
6	A	9th S. a. Tr. Transfiguration. Tides { 10.8 11.7	° Showers
7	M.	Name of Jesus Tides { 10.9 11.4	now.
8	Tu.	Battle Britain on Eq. { 11.4 10.9	
9	W.	Isaac Walton b. 1593. ♀ Gr. Hel. I. at. N. Tides { 10.9 10.7	
10	Th.	St. Lawrence. ♀ Gr. El. E. in Aph. { 10.8 10.4	
11	Fr.	Gandhi arrested 1942 (9th). Tides { 9.5 10.1	Hotter.
12	Sa.	♂ ♀ C. Tides { 9.0 9.9	Fine
13	A	10th S. a. Tr. ♂ ♀ ♀. { 9.8 9.8	days.
14	M.	"Liberty Tree" consecr. 1765. ♂ ♀ C. Tides { 8.5 9.8	
15	Tu.	Assumption C runs high. Tides { 8.5 9.9	
16	W.	Holiday Vermont. Tides { 8.8 10.0	Stormy
17	Th.	Sicily conquered 1943. Tides { 8.8 10.0	
18	Fr.	Tides { 9.0 9.0	now.
19	Sa.	So long, Sirius! The dog days are over. ♂ ♀ C. ♂ ♀ C.	
20	A	11th S. a. Tr. ♂ ♀ C. [19th	10.0
21	M.	Count Rumford] ♂ ♂ C. [20th	10.0
22	Tu.	on Eq. { 9.8 9.8 [21st ♂ ♀ C. C in Apo. { 9.8 9.8	
23	W.	Z. Morse b. 1761. ♀ Stat. in R. A. Tides { 9.4 9.2	
24	Th.	St. Bartholomew. Tides { 9.0 9.1	Nice cool
25	Fr.	Troy, N. Y., fire 1854. { 8.7 9.0	weather is
26	Sa.	♂ ♀ ♀ Tides { 8.4 9.0	expected.
27	A	12th S. a. Tr. Tides { 8.1 9.1	Could
28	M.	St. Augustine. Tides { 8.1 9.8	be real
29	Tu.	John the Baptist beheaded. C runs low { 8.2 9.7	
30	W.	Holiday Louisiana. Tides { 8.6 10.2	nire.
31	Th	Str. Metis sank 1872. ♀ Gr. Hel. I. at. S. ♂ ♀ C. { 9.2 10.8	

Nearly one half our tools in use on farms today are purchased second hand and are from one to fifty years old. Average age of some: potato dusters and milling machines, eight years; spring tooth harrows, nine years; cream separators, ten years; walking plows, twelve years; wagons, fifteen years; and rollers, eighteen years. Never throw away old parts. Many a manure spreader is the result of putting three old ones together — somehow.

Everytime a 16 inch gun is fired 100 pounds of nitrogen goes back into the air. That's about all the nitrogen there is in 600 pounds of nitrate of soda, or in two or three acres of leguminous plants. Turning under clover isn't as silly as many city folks might think.

Well on in August is the time to start cutting brush in wood's roads and orchards. If you want to keep your blueberry pasture bearing, cut that grey birch and pine between the bushes.

Keep after weeds and don't let them go to seed. Sell off your old hens before they begin to moult. Give shrubs and small trees around the farm plenty of water. Mulch your hoed crops if August is a month of drought — and it may be. Early potatoes should be about ready for digging and market. Get rid of the old strawberry bed now, and plant a late crop in place of them. Have you plenty of apple boxes, slats, covers, and nails?



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## SEPTEMBER, NINTH MONTH.

## ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.		0 /		Days.		0 /		Days.		0 /		Days.		0 /																																												
	1	8N. 10	7	5 57	13	4 40	19	1 21	25	0 59	2	7 48	8	5 34	14	3 17	20	0 58	26	1 22	3	7 26	9	5 12	15	2 54	21	0 34	27	1 46	4	7 04	10	4 49	16	2 31	22	0N. 10	28	2 09	5	6 42	11	4 26	17	2 08	23	0s. 12	29	2 32	6	6 19	12	4 02	18	1 44	24	0 36	30

○ Full Moon, 2nd day, 4 h. 21 m., evening, W.

☾ Last Quarter, 9th day, 8 h. 03 m., morning, W.

● New Moon, 17th day, 8 h. 37 m., morning, E.

☽ First Quarter, 25th day, 8 h. 07 m., morning, E.

KEY LETTERS REFER TO CORRECTIONS TABLE, PAGE 7, FOR ALL POINTS OUTSIDE NEW ENGLAND.

Day of Year	Day of Month	Day of the Week	☉		Key	☾		Key	Length of Days.		Sun Slow.	Moon's Ase.	Full Sea. Boston.		D's		D	Key	D	
			Rises.	h. m.		Sets.	h. m.		h.	m.			Morn.	Even.	h.	m.			h.	m.
245	1	Fr.	6 09	G	7 18	K	13 10	44	13	10 $\frac{1}{2}$	11	10 $\frac{1}{2}$	11	Aqr	4 18	D	morn			
246	2	Sa.	6 10	G	7 17	K	13 07	44	○	11 $\frac{1}{2}$	11	11 $\frac{3}{4}$	Aqr	rises	-		12 12			
247	3	S.	6 11	G	7 15	K	13 04	43	15	-	0 $\frac{1}{4}$	Psc	8 10	J		1 09				
248	4	M.	6 12	G	7 13	K	13 02	43	16	0 $\frac{1}{2}$	1	Psc	8 43	I		2 05				
249	5	Tu.	6 13	G	7 12	K	12 59	43	17	1 $\frac{1}{2}$	2	Ari	9 16	G		2 59				
250	6	W.	6 14	G	7 10	K	12 56	42	18	2 $\frac{1}{4}$	2 $\frac{3}{4}$	Ari	9 49	F		3 52				
251	7	Th.	6 15	G	7 08	K	12 53	42	19	3 $\frac{1}{4}$	3 $\frac{3}{4}$	Tau	10 24	D		4 45				
252	8	Fr.	6 16	G	7 06	K	12 51	42	20	4 $\frac{1}{4}$	4 $\frac{1}{2}$	Tau	11 04	C		5 38				
253	9	Sa.	6 17	H	7 05	J	12 48	41	21	5	5 $\frac{1}{2}$	G'm	11 47	C		6 31				
254	10	S.	6 18	H	7 03	J	12 45	41	22	6 $\frac{1}{4}$	6 $\frac{1}{2}$	G'm	morn	-		7 23				
255	11	M.	6 19	H	7 01	J	12 42	41	23	7 $\frac{1}{4}$	7 $\frac{1}{2}$	Cnc	12 35	B		8 16				
256	12	Tu.	6 20	H	6 59	J	12 39	40	24	8 $\frac{1}{4}$	8 $\frac{3}{4}$	Cnc	1 28	B		9 06				
257	13	W.	6 21	H	6 58	J	12 36	40	25	9 $\frac{1}{4}$	9 $\frac{1}{2}$	Leo	2 24	C		9 55				
258	14	Th.	6 22	H	6 56	J	12 34	40	26	10 $\frac{1}{4}$	10 $\frac{1}{4}$	Leo	3 22	D		10 42				
259	15	Fr.	6 23	H	6 54	J	12 31	39	27	11	11	Leo	4 20	E		11 27				
260	16	Sa.	6 24	H	6 52	J	12 28	39	28	11 $\frac{1}{2}$	11 $\frac{3}{4}$	Vir	5 19	F		12 11				
261	17	S.	6 25	H	6 51	J	12 25	38	●	-	0	Vir	sets	-		12 53				
262	18	M.	6 27	H	6 49	J	12 22	38	1	0 $\frac{1}{4}$	0 $\frac{3}{4}$	Lib	7 43	I		1 34				
263	19	Tu.	6 28	I	6 47	I	12 19	38	2	1	1 $\frac{1}{4}$	Lib	8 08	H		2 15				
264	20	W.	6 29	I	6 45	I	12 17	37	3	1 $\frac{1}{2}$	2	Lib	8 34	G		2 57				
265	21	Th.	6 30	I	6 43	I	12 14	37	4	2 $\frac{1}{4}$	2 $\frac{1}{2}$	Scor	9 02	F		3 41				
266	22	Fr.	6 31	I	6 42	I	12 11	37	5	3	3 $\frac{1}{4}$	Scor	9 34	E		4 27				
267	23	Sa.	6 32	I	6 40	I	12 08	36	6	3 $\frac{3}{4}$	4	Sgr	10 11	D		5 15				
268	24	S.	6 33	I	6 38	I	12 05	36	7	4 $\frac{1}{2}$	4 $\frac{3}{4}$	Sgr	10 55	C		6 07				
269	25	M.	6 34	I	6 36	I	12 02	36	8	5 $\frac{1}{4}$	5 $\frac{1}{2}$	Sgr	11 46	C		7 01				
270	26	Tu.	6 35	I	6 35	I	12 00	35	9	6 $\frac{1}{4}$	6 $\frac{1}{2}$	Cap	morn	-		7 58				
271	27	W.	6 36	I	6 33	I	11 57	35	10	7 $\frac{1}{4}$	7 $\frac{3}{4}$	Cap	12 46	C		8 56				
272	28	Th.	6 37	I	6 31	I	11 54	35	11	8 $\frac{1}{4}$	8 $\frac{3}{4}$	Aqr	1 53	D		9 54				
273	29	Fr.	6 38	I	6 29	I	11 51	34	12	9 $\frac{1}{4}$	9 $\frac{3}{4}$	Aqr	3 06	E		10 51				
274	30	Sa.	6 40	I	6 28	I	11 48	34	13	10 $\frac{1}{4}$	10 $\frac{1}{2}$	Psc	4 22	F		11 47				

SEPTEMBER hath 30 days.

[1944



The summer lotters, lingering going out,  
 Ambiguous and dim upon this hill,  
 Misted and blurred and troubled with a doubt,  
 And barely summer, still.

D.M.	D.W.	Aspects, Holidays, Heights of High Water, Weather, etc.	Farmer's Calendar.
1	Fr.	St. Giles Tides { 9.8 11.8	Clear
2	Sa.	Bar. 26.35 Long Key, Fla., 1935. Tides { 10.5 11.7	but
3	A	13th S.a.Tr. ♂♂Ψ. Tides { 11.0	
4	M.	Labor Day. ☾ on Eq. { 11.9 11.4	cooler.
5	Tu.	Card. Richelleu b. 1585. ☐⊕☉. Tides { 11.7 11.5	
6	W.	Boston Light Snuffed, 1942. ♂♂Ψ. ♂♂☉ Inf. { 11.4 11.3	
7	Th.	h in Peri { 10.8 11.0	Rain here and
8	Fr.	Nat. of Vir. Mary, Italy surrenders { 10.1 10.5	there.
9	Sa.	Holiday California. ♂⊕☾. ♂♂♂. ♂♀♂.	
10	A	14th S.a.Tr. Tides { 8.8 9.6	[9th { 9.4 10.0
11	M.	Election Day, Maine. ♂ h ☾. ☾ runs high. { 8.4 9.4	
12	Tu.	Holiday Maryland. Tides { 8.3 9.3	Crisp
13	W.	Tides { 8.4 9.4	evenings and
14	Th.	Holy Cross Day Tides { 8.6 9.5	chilly
15	Fr.	Trees are blushing. ♀ in R.A. ♂♀☾. { 8.9 9.6	days.
16	Sa.	♂♀☾. Tides { 9.2 9.7	[17th Tides { 9.4
17	A	15th S.a.Tr. Lam. Constitution Day.	
18	M.	Rosh Hashanah ♂♂Ψ☾. ♂ Stat. in R.A. Look	
19	Tu.	♀ in ♂♂. [18th ♂♂☾. ☾ on Eq. { 9.7 9.5	
20	W.	Tides { 9.5 9.6	[19th ♂♀☾ { 9.6 9.6 for a
21	Th.	St. Mathew. F. T. Ward k. at Tse-Ki, 1862. { 9.8 9.5	low
22	Fr.	N.E. hurricane 1938. ♀ Gr. el. W. Tides { 9.0 9.4	
23	Sa.	AUTUMN BEGINS. ☉ on ♀. ♂♂♂. ♀ in { 8.7 9.3	Peri. 9.3
24	A	16th S.a.Tr. World Fair 19-21st Tunbridge, Vt. { 8.4 9.2	
25	M.	St. Louis Cardinals defeated { 8.2 9.2	barometer
26	Tu.	White Sox 1930. ☾ low. { 8.2 9.3	about now.
27	W.	Yom Bat. of Britain Kippur over, 1940. ♂Ψ☉. { 8.4 9.6	
28	Th.	Adm. Sims d. 1936. Tides { 8.8 10.1	Clear and
29	Fr.	Michaelmas. Tides { 9.5 10.6	blustery.
30	Sa.	St. Jerome. Tides { 10.2 11.1	

Near villages the number of field mice is determined, among other things, by the number of cats—the more cats the fewer the field mice—the more old maids, the more cats. O well, you carry this one to its logical conclusions.

Watch the windfalls under your apple trees. Fruit that falls early is more often than not diseased and the sooner it is gotten out of your orchard the better. Nothing so good for pigs. Your fruit trees should be well propped by this time where the branches are heaviest laden.

Your grass should be sowed not later than the middle of this month if you are to have a good catch before winter and a good crop of hay next June.

Don't miss the agricultural fair if you can get to it. Encourage the boy or the girl to enter some of their prize products. Come back with some brand new ideas.

Mow the weeds around your barn before the seeds ripen. This is the best time to set young pine trees.

"A hundred good points of husbandry  
 Maintaineth good household,  
 with huswifry.  
 Housekeeping and husbandry, if it be good,  
 Must love one another like cousins in blood.  
 The wife, too, must husband as well as the man,  
 Or farwel thy husbandry, do what thou can."  
 Thomas Tusser

Telephone receivers are made of OXYBENZMETHYLENEGLYCOLANHYDRIDE!

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OCTOBER, TENTH MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.		Days.		Days.		Days.		Days.		Days.	
	0	/	0	/	0	/	0	/	0	/	0	/
1	3s.	19	7	5 38	13	7 54	19	10 06	25	12 13		
2	3	42	8	6 01	14	8 16	20	10 28	26	12 34		
3	4	06	9	6 24	15	8 39	21	10 49	27	12 54		
4	4	29	10	6 46	16	9 01	22	11 11	28	13 14		
5	4	52	11	7 09	17	9 23	23	11 32	29	13 34		
6	5	16	12	7 32	18	9 45	24	11 52	30	13 54		

- Full Moon, 2nd day, 0 h. 22 m., morning, W.
- ☾ Last Quarter, 8th day, 9 h. 12 m., evening, E.
- New Moon, 17th day, 1 h. 35 m., morning, E.
- ☽ First Quarter, 24th day, 6 h. 48 m., evening, W.
- Full Moon, 31st day, 9 h. 35 m., morning, W.

KEY LETTERS REFER TO CORRECTIONS TABLE, PAGE 7, FOR ALL POINTS OUTSIDE NEW ENGLAND.

Day of Year	Day of Month	Day of the Week	☉		☾		Length of Days.	Sun Slow.	Moon's Arc	Full Sea, Boston.		☽'s Place	☽ Sets.	Key	☽ Souths.
			Rises h. m.	Key	Sets. h. m.	Key				Morn.	Even.				
275	1	S	6 41	J	6 26	H	11 45	34	14	11	11½	Psc	5 40	H	morn
276	2	M	6 42	J	6 24	H	11 43	33	○	—	0	Ari	rises	—	12 42
277	3	Tu	6 43	J	6 22	H	11 40	33	16	0 ¼	0 ¾	Ari	7 44	G	1 36
278	4	W	6 44	J	6 21	H	11 37	33	17	1 ¼	1 ½	Tau	8 19	E	2 31
279	5	Th	6 45	J	6 19	H	11 34	32	18	2	2 ½	Tau	8 58	D	3 26
280	6	Fr	6 46	J	6 17	H	11 31	32	19	3	3 ¼	G'm	9 41	C	4 21
281	7	Sa	6 47	J	6 16	H	11 28	32	20	3 ¾	4 ¼	G'm	10 28	B	5 15
282	8	S	6 48	J	6 14	H	11 26	32	21	4 ¾	5	Cnc	11 21	B	6 09
283	9	M	6 50	J	6 12	H	11 23	31	22	5 ½	6	Cnc	morn	—	7 02
284	10	Tu	6 51	K	6 11	H	11 20	31	23	6 ¾	7 ¼	Cnc	12 16	C	7 52
285	11	W	6 52	K	6 09	G	11 17	31	24	7 ¾	8 ¼	Leo	1 14	C	8 40
286	12	Th	6 53	K	6 07	G	11 14	30	25	8 ¾	9	Leo	2 13	D	9 26
287	13	Fr	6 54	K	6 06	G	11 12	30	26	9 ½	9 ¾	Vir	3 12	F	10 09
288	14	Sa	6 55	K	6 04	G	11 09	30	27	10 ¼	10 ½	Vir	4 11	G	10 51
289	15	S	6 56	K	6 02	G	11 06	30	28	11	11 ¼	Vir	5 09	H	11 33
290	16	M	6 58	K	6 01	G	11 03	30	29	11 ½	11 ¾	Lib	6 08	I	12 15
291	17	Tu	6 59	K	5 59	G	11 01	29	●	—	0 ¼	Lib	sets	—	12 56
292	18	W	7 00	K	5 58	G	10 58	29	1	0 ½	0 ¾	Sco	7 05	F	1 40
293	19	Th	7 01	K	5 56	G	10 55	29	2	1 ¼	1 ½	Sco	7 36	E	2 25
294	20	Fr	7 02	K	5 55	F	10 52	29	3	1 ¾	2	Sco	8 11	D	3 13
295	21	Sa	7 04	L	5 53	F	10 50	29	4	2 ½	2 ¾	Sgr	8 52	C	4 03
296	22	S	7 05	L	5 52	F	10 47	29	5	3 ¼	3 ½	Sgr	9 40	C	4 56
297	23	M	7 06	L	5 50	F	10 44	28	6	4	4 ¼	Cap	10 35	C	5 51
298	24	Tu	7 07	L	5 49	F	10 42	28	7	5	5 ¼	Cap	11 38	C	6 46
299	25	W	7 08	L	5 47	F	10 39	28	8	6	6 ¼	Aqr	morn	—	7 42
300	26	Th	7 10	L	5 46	F	10 36	28	9	7	7 ¼	Aqr	12 47	D	8 38
301	27	Fr	7 11	L	5 44	F	10 34	28	10	8	8 ¼	Psc	1 59	F	9 32
302	28	Sa	7 12	L	5 43	F	10 31	28	11	9	9 ¼	Psc	3 14	G	10 26
303	29	S	7 13	L	5 42	F	10 28	28	12	9 ¾	10 ¼	Ari	4 29	I	11 19
304	30	M	7 15	M	5 40	E	10 26	28	13	10 ¾	11 ¼	Ari	5 45	J	morn
305	31	Tu	7 16	M	5 39	E	10 23	28	○	11 ½	—	Taur	rises	—	12 13



OCTOBER hath 31 days.

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For a grave moment, there,  
The last leaf, pendant . . . high . .  
Wore the wide, infinite air,  
Bore the enormous sky,  
And fell . . . with surely enough  
For sleep's long dreaming of.

D.M.	D.W.	Aspects, Holidays, Heights of High Water, Weather, etc.	Farmer's Calendar.
1	A	17th S. af. Tr. Rem. Tides {10.9 11.4	<p>This is apple picking month, though if the season has been early you may have harvested your Macs and earlier apples in September. Well-picked is often well-sold. Handle your apples like eggs, but twice as carefully. Eggs don't bruise.</p> <p>Pickers should know that apples are not pulled (this usually draws the stem out) but grasped by the whole hand and turned back and up towards the bough till gently released. They should know, too, that fruit cannot be dropped into the picking basket, nor the basket filled too full; and that apples are taken from basket to box two or three at a time and never poured out. Great care should be used in the placing of picking ladders, and in the pickers' movements in the trees. Next year's fruit spurs can be broken off at a touch. See that no tree is left until it is picked clean, even of small tight-clinging culls. Drop apples should be gotten out of the orchard as soon as possible, but never dump these near by. The rotting pile is a sure disease breeder. Best drops bring a fair price, but run no drops in with handpicks. Drops are bruised somewhere, and this is sure to show up late.</p> <p>It's a good practice in sorting and boxing the fruit to wear clean cotton gloves. Fingernails may scar fruit, and gloves are less likely to brush off the bloom.</p>
2	M.	Succoth. ☾ on Eq. Tides {11.4 Fine	
3	Tu.	Declinal arith. ☽☾ Gr. Hel. {11.5 Inv. 1602. ☽☾ Lat. N. {11.7	
4	W.	Robinson Crusoe got off at Juan Fernandez, 1704. ♀ in ☽ {11.4 11.7	
5	Th.	Great Snow 1836. Tides {11.0 11.5 and fresh.	
6	Fr.	♂♀☾. Tides {10.4 11.0	
7	Sa.	Chicago Fire 1871 (8th) ♂♂Ψ. Tides {9.7 10.4 Rain	
8	A	18th S.a.Tr. ♂☾☾. ☾ runs high. {9.1 9.3	
9	M.	St. Denys. Tides {8.6 9.3 and cold.	
10	Tu.	Chester, Vt., decl. its. independence 1774. Tides {8.3 9.0	
11	W.	Tides {8.2 8.9 Definitely don	
12	Th.	Columbus Day. Holiday most states. Tides {8.4 8.9	
13	Fr.	Gch. Time ad. 1831. ♂♂☾. ☽☾ {8.7 9.0 flannels.	
14	Sa.	Josh Billings d. 1855. ☾ in Apo. Tides {9.0 9.2	
15	A	19th S.a.Tr. ♂Ψ☾. Tides {9.3 9.3	
16	M.	Burgoyne surr. at Saratoga 1777. ♂♀☾. ☾ on Eq. {9.5 9.4	
17	Tu.	♂♂☾. Tides {9.7 An easterly	
18	W.	St. Luke. Holiday, Alaska. Tides {9.4 9.8 storm	
19	Th.	(Little Summer.) Va. floods 1942. ♂♀☾ {9.3 9.9 is	
20	Fr.	Trees are now bar. ♂♀☾ Sup. {9.1 9.9 due.	
21	Sa.	Sh mini Aztereth Tides {8.9 9.3 Windy	
22	A	20th S.a.Tr. Capt. Kidd gib. 1399. {8.7 9.6 and	
23	M.	Strange blast Rutland, vt., 1942 h Stat. in R. A. ☾ runs low.	
24	Tu.	Tides {8.3 9.4 [23rd Tides {8.5 9.5 raw.	
25	W.	St. Crispin. Burma Monsoons over Tides {8.4 9.4	
26	Th.	N. W. pass. disc. 1853. Tides {8.7 9.6	
27	Fr.	Navy Day. ♀ in ☽. {9.2 9.9 [28th {9.8 10.3	
28	Sa.	St. Simon & Jude. Italy inv. Greece 1940. ♂♀♂.	
29	A	21st S.a.Tr. Christ the King. ☾ on Eq. ☾ in Peri.	
30	M.	All Hallow's Eve. {11.1 10.9 [29th {10.5 10.6	
31	Tu.	Holiday Nevada. {11.6 Rawer, windy too.	

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## NOVEMBER, ELEVENTH MONTH.

## ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.	0	/	Days.	0	/	Days.	0	/	Days.	0	/	Days.	0	/
		1	14s.	33	7	16	23	13	18	04	19	19	33	25	20
	2	14	52	8	16	40	14	18	19	20	19	43	26	21	01
	3	15	10	9	16	58	15	18	35	21	20	00	27	21	12
	4	15	29	10	17	15	16	18	50	22	20	13	28	21	22
	5	15	47	11	17	31	17	19	04	23	20	25	29	21	33
	6	16	05	12	17	48	18	19	19	24	20	37	30	21	42

☾ Last Quarter, 7th day, 2 h. 28 m., evening, W.

● New Moon, 15th day, 6 h. 29 m., evening, W.

☽ First Quarter, 23rd day, 3 h. 53 m., morning, W.

○ Full Moon, 29th day, 8 h. 52 m., evening, E.

KEY LETTERS REFER TO CORRECTIONS TABLE, PAGE 7, FOR ALL POINTS OUTSIDE NEW ENGLAND.

Day of Year	Day of Month	Day of the Week	☉		Key	☽		Key	Length of Days	Sun Slow.	Moon's Age	Full Sea. Boston.		D's Place	☽		Key	☽			
			Rises.	h. m.		Sets.	h. m.					Morn.	Even.		Rises.	h. m.		Sets.	h. m.		
306	1	W.	7	17	M	5	38	E	10	21	28	15	0	0 <sup>1</sup> / <sub>4</sub>	Tau	6	48	D	1	08	
307	2	Th.	7	18	M	5	36	E	10	18	28	16	0 <sup>3</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>4</sub>	G'm	7	30	C	2	04	
308	3	Fr.	7	19	M	5	35	E	10	16	28	17	1 <sup>3</sup> / <sub>4</sub>	2	G'm	8	17	B	3	01	
309	4	Sa.	7	21	M	5	34	E	10	13	28	18	2 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>4</sub>	G'm	9	09	B	3	57	
310	5	S.	7	22	M	5	33	E	10	11	28	19	3 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>4</sub>	Cnc	10	05	B	4	52	
311	6	M.	7	23	M	5	32	E	10	08	28	20	4 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>	Cnc	11	03	C	5	45	
312	7	Tu.	7	24	M	5	31	E	10	06	28	21	5 <sup>1</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	Leo	morn	—	—	—	6	35
313	8	W.	7	26	M	5	29	E	10	04	28	22	6 <sup>1</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>2</sub>	Leo	12	03	D	7	22	
314	9	Th.	7	27	N	5	28	D	10	01	28	23	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>2</sub>	Vir	1	03	E	8	06	
315	10	Fr.	7	28	N	5	27	D	9	59	28	24	8	8 <sup>1</sup> / <sub>4</sub>	Vir	2	02	F	8	49	
316	11	Sa.	7	29	N	5	26	D	9	57	28	25	9	9 <sup>1</sup> / <sub>4</sub>	Vir	3	00	H	9	31	
317	12	S.	7	31	N	5	25	D	9	55	28	26	9 <sup>3</sup> / <sub>4</sub>	10	Lib	3	59	I	10	12	
318	13	M.	7	32	N	5	24	D	9	52	28	27	10 <sup>1</sup> / <sub>4</sub>	10 <sup>3</sup> / <sub>4</sub>	Lib	4	58	J	10	54	
319	14	Tu.	7	33	N	5	23	D	9	50	28	28	11	11 <sup>1</sup> / <sub>4</sub>	Scor	5	58	K	11	37	
320	15	W.	7	34	N	5	23	D	9	48	29	●	11 <sup>1</sup> / <sub>2</sub>	—	Scor	sets	—	—	—	12	22
321	16	Th.	7	36	N	5	22	D	9	46	29	0	0	0 <sup>1</sup> / <sub>4</sub>	Scor	6	11	D	1	09	
322	17	Fr.	7	37	N	5	21	D	9	44	29	1	0 <sup>3</sup> / <sub>4</sub>	0 <sup>3</sup> / <sub>4</sub>	Sgr	6	50	C	1	59	
323	18	Sa.	7	38	N	5	20	D	9	42	29	2	1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	Sgr	7	36	C	2	52	
324	19	S.	7	39	N	5	19	C	9	40	29	3	2 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>4</sub>	Cap	8	30	C	3	47	
325	20	M.	7	41	O	5	18	C	9	38	30	4	3	3	Cap	9	30	C	4	43	
326	21	Tu.	7	42	O	5	18	C	9	36	30	5	3 <sup>3</sup> / <sub>4</sub>	4	Aqr	10	36	D	5	48	
327	22	W.	7	43	O	5	17	C	9	34	30	6	4 <sup>1</sup> / <sub>2</sub>	4 <sup>3</sup> / <sub>4</sub>	Aqr	11	46	E	6	32	
328	23	Th.	7	44	O	5	16	C	9	32	30	7	5 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>4</sub>	Aqr	morn	—	—	—	7	25
329	24	Fr.	7	45	O	5	16	C	9	30	31	8	6 <sup>1</sup> / <sub>2</sub>	7	Psc	12	58	G	8	17	
330	25	Sa.	7	47	O	5	15	C	9	29	31	9	7 <sup>1</sup> / <sub>2</sub>	8	Psc	2	10	H	9	09	
331	26	S.	7	48	O	5	15	C	9	27	31	10	8 <sup>1</sup> / <sub>2</sub>	9	Ari	3	24	I	10	00	
332	27	M.	7	49	O	5	14	C	9	26	32	11	9 <sup>1</sup> / <sub>2</sub>	10	Ari	4	37	K	10	53	
333	28	Tu.	7	50	O	5	14	C	9	24	32	12	10 <sup>1</sup> / <sub>4</sub>	10 <sup>3</sup> / <sub>4</sub>	Tau	5	51	L	11	48	
334	29	W.	7	51	O	5	14	C	9	22	32	○	11 <sup>1</sup> / <sub>4</sub>	11 <sup>3</sup> / <sub>4</sub>	Taur	rises	—	—	—	morn	—
335	30	Th.	7	52	O	5	13	C	9	21	33	14	—	0	G'm	6	03	C	12	44	

NOVEMBER hath 30 days.

[1944



Now is such sound:  
As though the mournful dead  
Rose from the ground,  
Hearing the rain overhead  
And the wind's plight,  
Wandering the homeless air . .  
As though the night  
Were thronged with wanderers there.

D. M.	D. W.	Aspects, Holidays, Heights of High Water, Weather, etc.	Farmer's Calendar.
1	W.	All Saints, Holiday Louisiana. Tides {10.9	<p>Harvest is home — and you may give a thought now to the old cock partridge at the orchard end and the woodcock in the alder run. The moon is just fine for coon hunting. But don't let things slide until winter sets in. How about that root cellar? Are your cattle off pasture? Have you put the barns in order, replaced the broken panes and stopped the draughty places? Are all tools cleaned and dry and put under cover where they belong?</p> <p>This is a good time to get the rocks out as you do your fall plowing, and to spread manure. Harrow it well in if possible before the ground freezes, particularly if you are working a sidehill field. Loose manure will run badly on such a slope, where a level field would hold it.</p> <p>Pigs killed this month will keep well. Get to your cider making from the best of your "seconds" or "drop" winter apples, but let no rotten apples through the press. You may do some trimming of grape vines and fruit trees, but not so lavishly as to invite winter killing. Be sure all your apple proprs are out from under the boughs. They will score the bark badly if left till spring. Store your apple boxes and ladders. Be sure that the hen house is well cleaned up and sacking tacked tight over the window openings. Have you got enough wood in? Have you manured the asparagus bed? Give thanks for harvest in and your fruits of freedom.</p>
2	Th.	Holiday Canal Zone. 6 8 C. Tides {10.7	
3	Fr.	St. Hubert's, Holiday Canal Zone. {10.4	
4	Sa.	6 h C. C. high. Tides {9.9	
5	A	22nd S. af. Tr. Fawkes runs Day. Tides {10.2	
6	M.	Roses bloom New Zealand. ♀ Aph. {8.9	
7	Tu.	Election Day. Tides {8.5	
8	W.	S. Bernhardts debut N. Y. 1880. ♀ Aph. in 8. {8.8	
9	Th.	U. S. forces land N. Africa 1942 (7th). Tides {8.5	
10	Fr.	Holiday Canal Zone. 6 4 C. C. in {8.5	
11	Sa.	St. Martin, Armistice Day. 6 5 C. Tides {8.7	
12	A	23rd S. af. Tr. St. Martin. C on Eq. {9.0	
13	M.	Indian Summer begins. Tides {8.9	
14	Tu.	Phila. Jack O'Brien d. 1942 (12th). 6 8 C. {9.7	
15	W.	Solomons victory 1942. 6 8 C. {9.9	
16	Th.	Mason-Dixon line begun 1765. Tides {9.1	
17	Fr.	King's Name Day, Belgium, 15th. 6 8 C. {9.1	
18	Sa.	6 9 C. Tides {10.2	
19	A	24th S. af. Tr. Holiday Puerto Rico. C runs low. {8.8	
20	M.	Publ. date The Old Farmer's Almanack. Tides {10.0	
21	Tu.	Presentation of Our Lady at the Temple. {8.7	
22	W.	St. Cecilia. Tides {8.7	
23	Th.	St. Clement. Holiday Maryland. {8.9	
24	Fr.	Dakar joins U. N. 1942 (22nd). Tides {9.1	
25	Sa.	St. Catherine Tides {9.5	
26	A	25th S. af. Tr. ♀ Gr. Hel. Lat. S. C on Eq. {9.8	
27	M.	S.S. Portland sank 1898 (9-10 A.M.). C in Peri Tides {10.6	
28	Tu.	1st U.S. postoffice 1783. {11.1	
29	W.	Winston Churchill b. 1874. {11.4	
30	Th.	Thanksgiving. St. Andrew. 6 8 C. {11.5	

Today's joys tomorrow are realized too late.



1944]

## DECEMBER, TWELFTH MONTH.

## ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.		0 /		Days.		0 /		Days.		0 /		Days.		0 /																																												
	1	21s. 52	7	22 39	13	23 11	19	23 26	25	23 23	2	22 01	8	22 45	14	23 14	20	23 26	26	23 21	3	22 09	9	22 51	15	23 17	21	23 27	27	23 19	4	22 17	10	22 57	16	23 20	22	23 27	28	23 16	5	22 25	11	23 02	17	23 22	23	23 26	29	23 13	6	22 32	12	23 07	18	23 24	24	23 25	30

- ☾ Last Quarter, 7th day, 10 h. 57 m., morning, W.  
 ○ New Moon, 15th day, 10 h. 34 m., morning, E.  
 ☽ First Quarter, 22nd day, 11 h. 54 m., morning, E.  
 ● Full Moon, 29th day, 10 h. 38 m., morning, W.

KEY-LETTERS REFER TO CORRECTIONS TABLE, PAGE 7, FOR ALL POINTS OUTSIDE NEW ENGLAND.

Day of Year	Day of Month	Day of the Week	☉		Key	☽		Key	Length of Days.		Sun Slow.	Moon's Alt.	Full Sea. Boston.		D's Place	D		Key	D	
			Rises.	h. m.		Sets.	h. m.		h.	m.			Morn.	Even.		Rises.	h. m.		h.	m.
336	1	Fr.	7 53	O	5 13	C	9 20	33 15	0 1/2	0 3/4	G'm	6 54	B	1 41						
337	2	Sa.	7 54	O	5 13	C	9 18	34 16	1 1/2	1 1/2	Cnc	7 49	B	2 37						
338	3	S.	7 55	O	5 12	C	9 17	34 17	2 1/4	2 1/2	Cnc	8 47	B	3 33						
339	4	M.	7 56	O	5 12	B	9 16	34 18	3	3 1/4	Leo	9 48	C	4 25						
340	5	Tu.	7 57	O	5 12	B	9 15	35 19	3 3/4	4	Leo	10 50	D	5 15						
341	6	W.	7 58	P	5 12	B	9 14	35 20	4 3/4	5	Leo	11 50	F	6 01						
342	7	Th.	7 59	P	5 12	B	9 12	36 21	5 1/2	5 3/4	Vir	morn	-	6 45						
343	8	Fr.	8 00	P	5 12	B	9 12	36 22	6 1/2	6 3/2	Vir	12 49	G	7 27						
344	9	Sa.	8 01	P	5 12	B	9 11	36 23	7 1/4	7 1/2	Lib.	1 47	H	8 08						
345	10	S.	8 02	P	5 12	B	9 10	37 24	8 1/4	8 1/2	Lib	2 46	I	8 49						
346	11	M.	8 03	P	5 12	B	9 09	37 25	9	9 1/4	Lib	3 46	J	9 31						
347	12	Tu.	8 04	P	5 12	B	9 08	38 26	9 3/4	10	Scor	4 47	L	10 15						
348	13	W.	8 04	P	5 12	B	9 08	38 27	10 1/4	10 3/4	Scor	5 49	M	11 02						
349	14	Th.	8 05	P	5 12	B	9 07	39 28	11	11 1/2	Sgr	6 53	N	11 52						
350	15	Fr.	8 06	P	5 13	B	9 07	39 ●	11 3/4	-	Sgr	sets	-	12 44						
351	16	Sa.	8 07	P	5 13	B	9 06	40 1	0 1/4	0 1/2	Sgr	6 22	B	1 40						
352	17	S.	8 07	P	5 13	B	9 06	40 2	1	1 1/4	Cap	7 22	C	2 37						
353	18	M.	8 08	P	5 14	B	9 06	41 3	1 3/4	2	Cap	8 28	C	3 33						
354	19	Tu.	8 09	P	5 14	B	9 05	41 4	2 1/2	2 3/4	Aqr	9 37	E	4 29						
355	20	W.	8 09	P	5 14	B	9 05	42 5	3 1/2	3 3/4	Aqr	10 49	F	5 22						
356	21	Th.	8 10	P	5 15	B	9 05	42 6	4 1/4	4 1/2	Psc	morn	-	6 14						
357	22	Fr.	8 10	P	5 15	B	9 05	43 7	5 1/4	5 1/2	Psc	12 00	G	7 05						
358	23	Sa.	8 11	P	5 16	B	9 05	43 8	6 1/4	6 1/2	Ari	1 12	I	7 55						
359	24	S.	8 11	P	5 17	B	9 05	44 9	7 1/4	7 3/4	Ari	2 23	J	8 46						
360	25	M.	8 11	P	5 17	B	9 06	44 10	8 1/4	8 3/4	Tau	3 35	L	9 38						
361	26	Tu.	8 12	P	5 18	B	9 06	45 11	9	9 3/4	Tau	4 46	M	10 31						
362	27	W.	8 12	P	5 19	B	9 06	45 12	10	10 1/2	G'm	5 57	N	11 27						
363	28	Th.	8 12	P	5 19	B	9 07	46 13	11	11 1/2	G'm	7 05	O	morn						
364	29	Fr.	8 13	P	5 20	B	9 07	46 ○	11 3/4	-	Cnc	rises	-	12 23						
365	30	Sa.	8 13	P	5 21	B	9 08	47 15	0 1/4	0 1/2	Cnc	6 32	B	1 19						
366	31	S.	8 13	P	5 22	B	9 09	47 16	1	1 1/4	Cnc	7 33	C	2 13						



Now comes white stillness down,  
 On the piled tree, on the town,  
 On the dim field beyond  
 Our seeing, where the fond  
 Thought wanders, knowing how  
 The fence and field, just now,  
 Are one.  
 And the mind, no less, will stay  
 Its noise, being hushed away . . .  
 So the snow's will is done.

D.M.	D.W.	Aspects, Holidays, Heights of High Water, Weather, etc.	Farmer's Calendar.
1	Fr.	Holiday Iceland. Tides {10.0 11.4	<i>Fine</i>
2	Sa.	A. St. Germain pardoned 1942. ☽♂♂. ☾ runs high. {9.8 11.0	
3	A	1st S. in Ad. ☽♂♂. {9.5 10.6	<i>weather</i>
4	M.	Nat'l Grange Id. 1867. ♀ Gr. El. Tides {9.1 10.0	<i>for so late.</i>
5	Tu.	Tides {8.8 9.4	
6	W.	St. Nicholas. Tides {8.5 8.9	<i>Getting</i>
7	Th.	Pearl Harbor, 1941. Tides {8.4 8.5	<i>much</i>
8	Fr.	Immac. Conc. ☽♂♂. ☾ in Apo. {8.4 8.8	
9	Sa.	Repulse & P. W. sunk 1941. ☽♂♂. ☾ on Eq. {8.5 8.2	
10	A	2d S. in Ad. Colin Kelly d. 1941. Tides {8.7 8.2	
11	M.	Chanukah. Tides {9.0 8.8	<i>colder.</i>
12	Tu.	Louis E. Kirstein d. 1942 (10th). Tides {9.8 8.5	<i>Snow</i>
13	W.	Lucyl ♀ Stat. in R. A. Tides {9.6 8.7	<i>may be</i>
14	Th.	The halcyon days (thru 28th). ☽♂♂. {9.9 8.8	<i>seen.</i>
15	Fr.	Buna occ. yesterday, 1942. Tides {10.2	<i>Rainy</i>
16	Sa.	♀ in ☽. ☽♂♂. ☾ runs low. {9.0 10.5	<i>and</i>
17	A	3d Sun. in Ad. Thorne Glacier disc. 1930. {9.1 10.6	
18	M.	Henry James d. 1882. ☽♂♂. ☽♀♂. {9.2 10.6	
19	Tu.	Below zero for 1st time Nantucket; 1942. Tides {9.2 10.5	<i>sleet.</i>
20	W.	(17th—then 20th). ♀ Peri. in {9.2 10.2	<i>A</i>
21	Th.	St. Thom. Forefather's WIN. Day. BEA. ☾ en. ♀.	
22	Fr.	☽♀♂. Inf. Tides {9.4 9.6	[21 <sup>st</sup> Tides {9.8 9.9
23	Sa.	Darlan ass., 1942 (24th). ☾ on Eq. ☾ in Peri. Tides {9.6 9.4	
24	A	4th S. in Ad. {9.8 9.3	<i>fine spell</i>
25	M.	Christmas. Will be white at Nantucket 1943? {10.1 9.2	
26	Tu.	St. Stephen. {10.4 9.8	<i>then real winter</i>
27	W.	St. John, Evang. ☽♂♂. {10.7 9.4	<i>settles</i>
28	Th.	Holy Inn. or Childermas. ☽♀♂. {10.9 9.4	
29	Fr.	☽♀♂. ☽♂♂. [28 <sup>th</sup> ☽♂♂.	
30	Sa.	♀ Gr. Hel. {9.4 10.9	[29 <sup>th</sup> ☾ runs high {11.0 —
31	A	1st S. af. Ch. Inventory Day. {9.4 10.6	<i>in.</i>

The old year beats a path to our door. We can almost see its end. This is the top of the hill and we may look forward to the new year stretching before us, and back to the paths of the old. And we know pretty much where we are going. This is the month when our home, our hearth, and our family come close—when we may turn again the old familiar pages of books and memories. The white breath of winter finds us ready and secure.

The best of our harvest is a good solid lump of security in our bins. No man owns more than we, nor feels more fully the pride of ownership. The crammed, sweet-smelling lofts, the well-filled silo, our cattle sleek in their stanchions—these are the second harvest and the fullest.

Chores seem less exacting now—and if the wood box cries for filling, there is wood "to burn". Our business grows now from our ease. No other month gives us so fully the chance to survey and plan and repair: a new box stall, another preserve closet for mother, a chance to put the manure spreader in shape and to whitewash the cellar. And a chance, too, to put our own lives in order and weigh truly the meaning of the words "Peace on earth, Good will toward men."

And so farewell as we again turn the page to another year. God be good to you and bless you always.

## VENUS, MARS, JUPITER AND SATURN, 1944.

Below are given the times of the rising or setting of the Planets named, on the first, eleventh and twenty-first days of each month. The time of the rising or setting of any one of said Planets between the days named may be found with sufficient accuracy by interpolation. For explanation of keys (used in adjusting times given to your town) see page 6.

1944		VENUS h. m.	Key	MARS h. m.	Key	JUPITER h. m.	Key	SATURN h. m.	Key
JANUARY	1st	rises 4 52A.M.	N	sets 5 54A.M.	Q	rises 9 08P.M.	E	sets 6 58A.M.	P
"	11th	" 5 12A.M.	O	" 5 14A.M.	Q	" 8 24P.M.	E	" 6 16A.M.	P
"	21st	" 5 30A.M.	O	" 4 40A.M.	Q	" 7 39P.M.	E	" 5 34A.M.	P
FEBRUARY	1st	rises 5 49A.M.	O	sets 4 05A.M.	Q	rises 6 50P.M.	E	sets 4 48A.M.	P
"	11th	" 5 58A.M.	O	" 3 41A.M.	Q	rises 6 03P.M.	E	" 4 08A.M.	P
"	21st	" 6 04A.M.	O	" 3 18A.M.	Q	sets 7 21A.M.	M	" 3 29A.M.	P
MARCH	1st	rises 6 06A.M.	N	sets 3 00A.M.	Q	sets 6 43A.M.	N	sets 2 54A.M.	P
"	11th	" 6 01A.M.	M	" 2 41A.M.	Q	" 6 01A.M.	N	" 2 16A.M.	P
"	21st	" 5 54A.M.	L	" 2 23A.M.	Q	" 5 20A.M.	N	" 1 38A.M.	P
APRIL	1st	rises 5 44A.M.	J	sets 2 03A.M.	Q	sets 4 34A.M.	N	sets 12 56A.M.	P
"	11th	" 5 33A.M.	I	" 1 45A.M.	Q	" 3 54A.M.	N	" 12 23A.M.	P
"	21st	" 5 21A.M.	H	" 1 27A.M.	Q	" 3 15A.M.	N	" 11 47P.M.	P
MAY	1st	rises 5 09A.M.	G	sets 1 08A.M.	Q	sets 2 35A.M.	N	sets 11 11P.M.	P
"	11th	" 5 00A.M.	E	" 0 47A.M.	P	" 1 58A.M.	N	" 10 39P.M.	P
"	21st	" 4 54A.M.	D	" 0 27A.M.	P	" 1 22A.M.	N	" 10 05P.M.	P
JUNE	1st	rises 4 49A.M.	C	sets 12 03A.M.	O	sets 12 41A.M.	M	sets 9 26P.M.	P
"	11th	" 4 53A.M.	B	" 11 40P.M.	O	" 12 06A.M.	M	sets 8 54P.M.	P
"	21st	rises 5 02A.M.	A	" 11 17P.M.	N	" 11 31P.M.	M	rises 5 22A.M.	B
JULY	1st	sets 8 35P.M.	Q	sets 10 53P.M.	M	sets 10 55P.M.	M	rises 4 41A.M.	B
"	11th	" 8 42P.M.	P	" 10 28P.M.	M	" 10 21P.M.	M	" 4 07A.M.	B
"	21st	" 8 43P.M.	O	" 10 03P.M.	L	" 9 46P.M.	M	" 3 33A.M.	B
AUGUST	1st	sets 8 41P.M.	N	sets 9 35P.M.	K	sets 9 08P.M.	L	rises 2 56A.M.	B
"	11th	" 8 33P.M.	L	" 9 10P.M.	J	" 8 33P.M.	L	" 2 21A.M.	B
"	21st	" 8 22P.M.	K	" 8 44P.M.	J	sets 7 57P.M.	L	" 1 46A.M.	B
SEPTEMBER	1st	sets 8 08P.M.	J	sets 8 16P.M.	I	rises 6 04A.M.	F	rises 1 08A.M.	B
"	11th	" 7 52P.M.	H	" 7 51P.M.	H	" 5 36A.M.	G	" 12 32A.M.	B
"	21st	" 7 38P.M.	G	" 7 27P.M.	H	" 5 07A.M.	G	" 11 56P.M.	B
OCTOBER	1st	sets 7 25P.M.	F	sets 7 01P.M.	G	rises 4 39A.M.	G	rises 11 19P.M.	B
"	11th	" 7 19P.M.	D	" 6 37P.M.	F	" 4 10A.M.	G	" 10 41P.M.	B
"	21st	" 7 15P.M.	C	" 6 14P.M.	F	" 3 40A.M.	G	" 10 02P.M.	B
NOVEMBER	1st	sets 7 13P.M.	B	sets 5 47P.M.	E	rises 3 08A.M.	H	rises 9 19P.M.	B
"	11th	" 7 21P.M.	A	sets 5 27P.M.	D	" 2 36A.M.	H	" 8 38P.M.	B
"	21st	" 7 34P.M.	A	rises 7 34A.M.	N	" 2 05A.M.	H	" 7 59P.M.	B
DECEMBER	1st	sets 7 51P.M.	B	rises 7 31A.M.	O	rises 1 33A.M.	H	rises 7 11P.M.	B
"	11th	" 8 16P.M.	C	" 7 25A.M.	P	" 12 53A.M.	H	" 6 28P.M.	B
"	21st	" 8 39P.M.	D	" 7 24A.M.	P	" 12 22A.M.	H	rises 5 45P.M.	B
"	31st	sets 9 02P.M.	E	rises 7 21A.M.	P	rises 11 47A.M.	H	sets 8 08A.M.	P

## VEGETABLE TIME TABLE

(From planting date to your platter)

Beans.....	65 Days	Melons.....	105 Days
Beets.....	70 "	Onions.....	75 "
Cabbage.....	100 "	(We like 'em young)	
Carrots.....	80 "	Peas.....	68 "
Celery.....	145 "	Parsnips.....	300 "
Corn.....	98 "	(Yes, next Spring)	
Cucumbers.....	76 "	Radishes.....	35 "
Lettuce.....	52 "	Tomatoes.....	106 "

and turnips, if you're interested, about 85 days.

In years gone by, every herb had its planetary hour. The rule was that the following planets—Sun, Moon, Mars, Mercury, Jupiter, Venus, Saturn—ruled respectively these days of the week—Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday. You started at sunrise of the day in question, and during the first hour of sunrise, the planet of the day ruled. During the next hour, the next planet ruled, etc. You'll have to go to the herbs themselves, or page the nearest witch, to find out what difference it made.



## MORNING AND EVENING STARS, 1944

(A Planet is called Morning Star when it is above the horizon at sunrise, and Evening Star when it is above the horizon at sunset. More precisely, it is a Morning Star when it is less than  $180^\circ$  west of the Sun in right ascension and Evening Star when it is less than  $180^\circ$  east. When the planet is near conjunction or opposition, the distinction is unimportant.)

*Mercury* will be favorably situated for being seen as an Evening Star when near its greatest eastern elongations, about April 12, August 10, and December 4. On these dates it will set 1h 47m, 0h 56m, and 1h 15m, respectively, after sunset. It will be seen as a Morning Star when near its greatest western elongations, about January 31, May 29, and September 22, on which dates it will rise 1h 27m, 0h 56m, and 1h 32m, respectively, before sunrise.

*Venus* will be a Morning Star until June 27 and an Evening Star for the remainder of the year. It will be at its brightest as the year opens and closes, though not even then at the peak brilliance it can attain.

*Mars* will be an Evening Star until November 14 when it reaches conjunction. It will be a Morning Star from November 14 until the year's end.

*Jupiter* will be a Morning Star until February 11 when it reaches opposition, an Evening Star from February 11 until it comes to conjunction on August 31, and then a Morning Star again for the remainder of the year.

*Saturn* will be seen as an Evening Star until its conjunction with the Sun on June 21. From June 21 until opposition on December 28 it will be a Morning Star, then an Evening Star again for the last three days of the year.

## THE SEASONS, 1944

By definition the boundary points of the four seasons are the two equinoxes, vernal and autumnal, and the two solstices, summer and winter. These four points refer to particular positions reached by the sun during its annual journey around the zodiac.

As the earth is divided into northern and southern hemispheres by the equator, so the sky is divided into northern and southern hemispheres which envelop the northern and southern hemispheres of the earth respectively and are separated by an imaginary boundary circle called the celestial equator. The equinoxes are those two points on the celestial equator at which the sun crosses from the one celestial hemisphere into the other. The vernal equinox is that point at which the sun passes from the southern into the northern hemisphere, at which time spring begins in the northern hemisphere, while the autumnal equinox is the equivalent point at which the sun passes out of the northern celestial hemisphere into the southern to bring the beginning of autumn. The summer solstice marks the point at which the sun is farthest north of the celestial equator, at which time it passes overhead for observers on the Tropic of Cancer, while the winter solstice is the like point which marks the limit of the sun's journey south of the celestial equator. Then the sun passes overhead for observers on the Tropic of Capricorn. The sun's attainments of the solstices mark the beginning of summer and winter respectively in the northern hemisphere.

Also, see page four for dates the seasons begin.

## AVERAGE DATES FIRST AND LAST KILLING FROSTS

Boston . . . . .	Apr. 14 — Oct. 26	Richmond . . . . .	Mar. 31 — Nov. 2
Albany . . . . .	Apr. 24 — Oct. 15	Raleigh . . . . .	Mar. 27 — Nov. 5
Harrisburg . . . . .	Apr. 9 — Oct. 23	Macon . . . . .	Mar. 14 — Nov. 14
Cincinnati . . . . .	Apr. 8 — Oct. 23	Del Rio . . . . .	Feb. 23 — Nov. 27
Toledo . . . . .	Apr. 22 — Oct. 18	Helena . . . . .	May 7 — Sept. 29
Chicago . . . . .	Apr. 16 — Oct. 19	Santa Fe . . . . .	Apr. 25 — Oct. 19
Detroit . . . . .	Apr. 28 — Oct. 15	Tucson . . . . .	Mar. 11 — Nov. 9
Duluth . . . . .	May 6 — Oct. 5	Yuma . . . . .	Jan. 20 — Dec. 20
Bismarck . . . . .	May 11 — Sept. 21	Portland, Ore. . . . .	Mar. 15 — Nov. 21
Omaha . . . . .	Apr. 14 — Oct. 15	San Francisco . . . . .	Jan. 13 — Dec. 29

## ECLIPSES FOR THE YEAR 1944

In the year 1944 there will be two Eclipses, the minimum for any one year, both of the Sun.

I. *A Total Eclipse of the Sun*, January 25, 1944, invisible in its total phase anywhere in the United States. As a relatively minor partial eclipse it will be visible in the United States south of a line that follows approximately the northern borders of Florida, Texas and New Mexico and then dips diagonally across Arizona to the northern reaches of the Gulf of California. For observers in southeastern Arizona, New Mexico and western Texas, the eclipse will be a sunrise phenomenon. Only observers in eastern Texas, Louisiana, southern Mississippi and Florida will have a satisfactory view. The times and magnitude of the eclipse in certain cities are given in the table which follows; the times for other places in the Central War and Eastern War Time zones will differ but a few minutes from these.

	Galveston CWT	Fort Worth CWT	New Orleans CWT	Miami EWT
Eclipse begins	8:37 A.M.	8:49 A.M.	8:52 A.M.	9:53 A.M.
Middle of eclipse	9:07 A.M.	9:08 A.M.	9:13 A.M.	10:24 A.M.
Eclipse ends	9:38 A.M.	9:29 A.M.	9:35 A.M.	10:55 A.M.
% Sun's radius covered at maximum phase	11%	5%	4%	8%

Outside the United States the eclipse will be easily visible as a partial one, the magnitude of which will depend on the proximity of the observer to the path of totality, throughout Central America, the Caribbean, South America north of Latitude 40° South, the Pacific in the area approximately described as extending east from Longitude 105° West and lying between Latitude 20° North and Latitude 40° South, and in the Atlantic zone which lies approximately between Latitude 30° North and Latitude 25° South. At or close to sunset the eclipse will be visible as a partial one in western France, Spain, Portugal, the western Mediterranean, French West Africa, all but the eastern fringe of the Congo, and in northern Angola.

The path of totality, about 90 miles wide, extends from Longitude 111° 59' West, Latitude 3° 23' North, a point approximately 2,500 miles west of Colombia, across northern Peru, north central Brazil and the South Atlantic, to the coast of Africa at Sierra Leone, thence across French West Africa to end at Longitude 9° 23' East, Latitude 18° 48' North, a point in the southern Sahara. The maximum duration of the total phase, visible to an observer in central Brazil, will be 4 minutes 9 seconds.

II. *An Annular Eclipse of the Sun*, July 19-20, 1944, invisible in the United States. The path of the annular phase, about 70 miles wide, extends from Longitude 33° 25' East, Latitude 3° 30' North, a point in northern Uganda where the eclipse is in progress at sunrise, across Ethiopia, the Somalilands, the Arabian Sea, Central India, Lower Burma, Thailand and French Indo-China, into the Pacific to pass north of Borneo, south of the Philippines and just off the north coast of New Guinea, to end at Longitude 154° 20' East, Latitude 6° 57' South, a point in the Solomons close by Bougainville. The maximum duration of the annular phase, as observed from a point on the central line in Lower Burma, will be 3 minutes 42 seconds.

As a partial eclipse, the magnitude of which decreases with the increasing distance of an observer from the path of the annular phase, the phenomenon is visible throughout the Near and Middle East, East Africa, the Indian Ocean, southern Russia, all East Asia, western Australia, and Melanesia.

## OCCULTATIONS OF ALDEBARAN, 1944

No occultations of the bright star Aldebaran (Alpha Tauri) will be visible to observers in or near Boston during 1944.

## EXPLANATION OF ASTRONOMICAL TERMS USED IN THE OLD FARMER'S ALMANAC

The Sun is the pivot about which eight Planets and many smaller bodies, called collectively the Asteroids, revolve. The principal Planets, in order of distance from the Sun, are Mercury, Venus, the Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto. Of these Venus, Mars, Jupiter, and Saturn are brilliantly conspicuous to the naked eye. Mercury also is bright but found only with some difficulty. A Planet may be distinguished from the "fixed" stars by its comparatively steady light, and, if watched for a few nights, by the fact that it does not remain fixed relative to apparently neighboring stars. Each Planet, except Mercury, Venus, and Pluto, is likewise the pivot for the revolution of a moon or moons. Of these only the Moon which revolves about the Earth is visible to the naked eye. In aggregate these several bodies largely constitute the **Solar System**.

Because each member of the Solar System, except the pivotal Sun, moves constantly along a closed path unique to it and at its own particular speed, the relative positions of the members of the system as seen from the Earth constantly change. A description of the relative position of two or more of these bodies at any time is called the **Aspect** of the bodies.

The most general possible description of the position of a member of the solar system with respect to the Sun is through its elongation. **Elongation** (El.) is the apparent angular distance of the member from the Sun as seen from the Earth. The maximum possible value of the elongation is  $180^\circ$  at which time the Sun and the Moon or Planet appear on opposite sides of the sky. The term applied to this particular aspect is **Opposition** (8). One also distinguishes an elongation of exactly  $90^\circ$  by the term **Quadrature** (□) which means that the Moon or a Planet lies a quarter turn of the sky from the Sun. Quadratures and elongations are further described as East (E) or West (W). East when the Planet sets after the Sun, West when it sets before the Sun. Of most general application is the term **Conjunction** (♌), used with reference to any two heavenly bodies and referring to the moment of their closest apparent approach to each other. When an object is at or near conjunction with the Sun, it is invisible, lost in the Sun's glare.

Of the Moon and the eight Planets, Mercury and Venus alone never reach quadrature or opposition. Because their orbits about the Sun are smaller than the Earth's, they appear to oscillate from one side of the Sun to the other and back, attaining maximum elongations which average  $47^\circ$  for Venus and  $23^\circ$  for Mercury. Since Mercury is always therefore on the average less than  $23^\circ$  from the Sun, it is difficult to see and is most easily visible only when furthest from the Sun at or near the times of its **Greatest Elongations** (Gr. El.) as given under Aspects in the Calendar pages. Between the times of greatest elongation, Mercury and Venus are in conjunction with the Sun, once with the Planet between the Earth and Sun and again, half a revolution later, with the Sun between the Planet and the Earth. The former conjunction is denoted as **Inferior** (Inf.), the latter as **Superior** (Sup.). Conjunctions of the other Planets are always superior.

The sequence of major aspects for Mercury and Venus, is inferior conjunction, greatest elongation west, superior conjunction, greatest elongation east and back to inferior conjunction again. For the other Planets the sequence is conjunction, quadrature west, opposition, quadrature east, and back to conjunction again.

The four principal Phases of the Moon are closely related to aspects of the Moon and the Sun. **New Moon** occurs when the Sun and Moon are in conjunction; **First Quarter** when the Moon is almost exactly in quadrature east, or, more precisely, when, of the side of the Moon toward the Earth, exactly one half is illuminated; **Full Moon** when the Moon reaches opposition; and **Last Quarter** when the Moon is almost exactly in quadrature west. A more general description of the Moon's phase is the **Moon's Age**. This is reckoned in days starting at New Moon. The Moon's maximum age is  $29\frac{1}{2}$  days, representing the average time which elapses between successive New Moons. **Moon Souths** denote the times when the Moon is exactly above the south point of the observer's horizon.

There are other, more general systems of defining the positions not only of members of the Solar System, but of all celestial objects. The system most generally used is a celestial analogue of terrestrial longitude and latitude. As the points where the axis of rotation of



the Earth pierces its surface are known as the Poles, North and South respectively, so the points where the axis of rotation of the Earth extended would pierce the celestial sphere are known as the Celestial Poles, North and South. It is on these as pivots that the celestial sphere appears to rotate daily. As the earth's equator is an imaginary circle that divides the earth into two like hemispheres centered on the terrestrial poles, so an imaginary circle, the Celestial Equator, divides the celestial sphere into two hemispheres centered on the celestial poles. Celestial Declination (Dec.) is the measure of the angular distance any celestial object lies perpendicularly north or south of the Celestial Equator. It is  $0^\circ$  for an object on the Celestial Equator and increases to  $90^\circ$  at the North and South Celestial Poles. Celestial Declination is thus exactly analogous to terrestrial latitude. Similarly celestial Right Ascension (R.A.) is the analogue of terrestrial longitude and is the measure of the angular distance along the Celestial Equator from the Vernal Equinox (See The Seasons, page 33) to the point where that circle which passes through the object perpendicular to the Celestial Equator intersects the latter. Unlike terrestrial longitude Right Ascension is always measured in one direction, eastward along the equator from the Vernal Equinox or to the left from the Vernal Equinox for an observer in the northern hemisphere facing the south. It ranges in value from  $0^\circ$  to  $360^\circ$  or, in time equivalents, from 0 hours to 24 hours.

The second system of defining position uses the Ecliptic as the primary reference circle. The Ecliptic, like the Celestial Equator, is an imaginary circle that divides the celestial sphere into two hemispheres. It is specifically that circle in which the plane of the orbit of the Earth about the Sun would, if extended, cut the celestial sphere. The Sun as seen from the Earth, always lies on the Ecliptic which is then, observationally, the apparent path the Sun traces in the sky in a year due to the Earth's annual revolution about it. The Ecliptic is inclined at an angle of  $23\frac{1}{2}^\circ$  to the celestial equator. Positions of objects referred to the Ecliptic are called celestial Longitude (Lo.) and Latitude (Lat.). Celestial Latitude is the measure of the angular distance an object lies perpendicularly north or south of the Ecliptic and celestial Longitude the measure of the arc of the Ecliptic that lies between the Vernal Equinox and that circle through the object which intersects the Ecliptic at right angles. Like Right Ascension it is always measured eastward from the Vernal Equinox. It is particularly to be noted that these coordinates, used primarily in defining the positions of members of the Solar System, are not analogous to terrestrial longitude and latitude. Celestial Longitude and Latitude are further described as Geocentric (Geo.) and Heliocentric (Hel.), in the former fashion if the observer in measuring them is assumed to occupy an imaginary position at the center of the Earth, the latter if the position of observation is assumed to be at the center of the Sun. Such use of the centers of celestial objects in measurements of position is basic to astronomical calculations involving interrelationships of objects.

Other terms of position used in reference to members of the Solar System arise from their orbital motions under the Law of Gravitation. By the Law of Gravitation the closed orbit of one body about a second must be an ellipse inside which the controlling member of the pair occupies an off-center position. Under the gravitational influence of the Sun a Planet moves along its orbit in such a way that the greater the Planet's average distance from the Sun, the less is its average linear speed along its orbit. One consequence of this difference in the relative orbital speeds of the Earth and the Planets more distant from the Sun than the Earth is that, just before such a Planet comes to opposition, its apparent movement from right to left across the background of stars stops. For a time the Planet moves from left to right before once again it becomes stationary and thereafter resumes its normal progress toward the left. The so-called Stationary Points define the limits of this retrograde motion. Opposition occurs on a day about midway between the dates on which the Planet is stationary.

When a Planet in revolving about the Sun reaches the point of its orbit that lies closest to the Sun, it is said to be in Perihelion (Peri.), while at its furthest point it is said to be in Aphelion (Aph.). Synonymous terms applied to the Moon's revolution about the Earth are Perigee (Peri.) and Apogee (Apo.).

Since the Ecliptic is uniquely defined by the plane within which the Earth's orbit about the Sun lies, the planes of the orbits of all other members of the Solar System lie at angles to the plane of the Ecliptic. These angles are in the main very small, yet, though small,

necessitate that each member of the Solar System but the Earth pass through the plane of the Ecliptic twice in each complete revolution about the Sun. When a Planet or the Moon in its motion crosses the Ecliptic, it is said to be at a **Node**. If its motion carries it from north of the Ecliptic to south of it, the Node is called the **Descending Node** ( $\cap$ ); a crossing in the opposite direction occurs at the **Ascending Node** ( $\cap$ ).

When conjunction or opposition of the Sun and the Moon occurs with the Moon at or near a node, there will be an **Eclipse**. At conjunction the eclipse will be a **Solar Eclipse**, at opposition a **Lunar Eclipse**, since the Moon will enter the shadow of the Earth. This shadow in the region through which the Moon passes during an eclipse consists of a central portion of deep shadow, the **Umbra**, surrounded by a concentric area of partial shadow, the **Penumbra**. An eclipse may be **Partial** or **Total** according as the body is partly or wholly obscured. A lunar eclipse is partial or total only in respect to that degree to which the Moon enters the umbra of the Earth's shadow. If the Moon passes only through the penumbra, the phenomenon is called an **Appulse**. An eclipse of the Sun may be partial or total or it may be an **Annular Eclipse**, in which case the Moon, though it becomes centered on the disk of the Sun, is so far from the Earth that its apparent diameter is less than the Sun's and a ring, or annulus, of sunlight shows around the Moon at maximum eclipse. **Occultations** are eclipses of stars by the Moon. Most conspicuous of these to the naked eye are the occultations of the bright star Aldebaran, the times for which are tabulated in the Almanac, page 34.

Since the inclination of the orbits of the Planets and the Moon relative to the plane of the Ecliptic are small, the Moon and the Planets never wander outside a belt of sky that has a width of sixteen degrees and the center line of which is the Ecliptic. This belt is called **The Zodiac**. The ancients divided the Zodiac into twelve equal divisions called signs and gave to each division the name of the constellation found within it. One speaks then of the **Signs of the Zodiac**, which are in order: Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricornus, Aquarius, and Pisces. The **Moon's Place**, as tabulated in the Almanac, refers to the sign of the Zodiac in which the Moon lies.

Of the terms used in the Almanac under **Chronological Cycles**, **Epact** and **Roman Indiction** are used in reckoning ecclesiastical calendars, the **Dominical Letter**, **Golden Number**, and year of the **Solar Cycle** in reckoning civil calendars. The **Julian Period** is a period which harmonizes chronological cycles. The first year of the Julian Period was 4713 B.C. Its length is 7980 Julian years. The designation of a year in the Julian Period is intelligible to any chronologist, whatever may be his religion.

### LENGTH OF TWILIGHT

Subtract from time of sunrise for dawn.

Add to time of sunset for dark

Latitude	25°N	31°N	37°N	43°N	48°N
	to 30°N	to 36°N	to 42°N	to 47°N	to 49°N
	h m	h m	h m	h m	h m
Jan. 1 to Apr. 11	1 20	1 26	1 33	1 42	1 50
Apr. 11 to May 3	1 23	1 28	1 39	1 51	2 04
May 3 to May 15	1 26	1 34	1 47	2 02	2 22
May 15 to May 26	1 29	1 38	1 52	2 13	2 42
May 26 to July 23	1 32	1 43	1 59	2 27	—
July 23 to Aug. 4	1 29	1 38	1 52	2 13	2 42
Aug. 4 to Aug. 15	1 26	1 34	1 47	2 02	2 22
Aug. 15 to Sept. 6	1 23	1 28	1 39	1 51	2 04
Sept. 6 to Dec. 31	1 20	1 26	1 33	1 42	1 50

## TIDE CORRECTIONS

*For full explanation of use, see page 5.*

To obtain the time and height of high water at any place, apply the differences in accordance with the sign given to the daily predictions for Boston (Commonwealth Piers). Where a value in the "height difference" column is preceded by a \*, the height at Boston should be multiplied by this ratio.

	<i>Time Differ- ence h.m.</i>	<i>Height Differ- ence Feet</i>		<i>Time Differ- ence h.m.</i>	<i>Height Differ- ence Feet</i>
<b>MAINE</b>			<b>PENNSYLVANIA</b>		
Augusta . . . . .	+3 50	*0.4	Philadelphia . . . .	+2 29	*0.5
Bangor . . . . .	-0 05	+3.6	<b>DELAWARE</b>		
Bar Harbor . . . . .	-0 33	+1.1	Rehoboth . . . . .	-3 37	*0.4
Boothbay Harbor . . .	-0 20	-0.8	<b>MARYLAND</b>		
Eastport . . . . .	-0 28	*1.9	Baltimore . . . . .	-4 25	*0.1
Old Orchard . . . . .	-0 10	-0.7	Ocean City . . . . .	-3 57	*0.4
Portland . . . . .	-0 10	-0.6	<b>DISTRICT OF COLUMBIA</b>		
Stonington . . . . .	-0 30	+0.2	Washington . . . . .	-3 08	*0.3
<b>NEW HAMPSHIRE</b>			<b>VIRGINIA</b>		
Hampton . . . . .	+0 15	-1.2	Norfolk . . . . .	-1 54	*0.3
<b>MASSACHUSETTS</b>			Virginia Beach . . .	-3 14	*0.3
Fall River . . . . .	-3 16	*0.5	<b>NORTH CAROLINA</b>		
Falmouth . . . . .	-0 40	*1.1	Beaufort . . . . .	-2 59	*0.3
Hyannisport . . . . .	+0 45	*0.3	Carolina Beach . . .	-3 30	*0.4
Lynn . . . . .	+0 05	-0.2	<b>SOUTH CAROLINA</b>		
Marblehead . . . . .	-0 05	-0.3	Myrtle Beach . . . .	-3 45	*0.5
Marion . . . . .	-3 16	*0.4	Charleston . . . . .	-3 15	*0.5
Monument Beach . . .	-3 06	*0.4	<b>GEORGIA</b>		
Nantasket . . . . .	+0 10	+1.0	St. Simon's Island . .	-2 51	*0.7
Nantucket . . . . .	+0 50	*0.3	Savannah . . . . .	-2 40	*0.8
New Bedford . . . . .	-3 21	*0.4	Tybee Beach . . . . .	-3 28	*0.8
Oak Bluffs . . . . .	+0 05	*0.2	<b>FLORIDA</b>		
Onset . . . . .	-3 06	*0.5	Daytona . . . . .	-3 20	*0.4
Plymouth . . . . .	0 00	+1.0	Fort Lauderdale . . .	-2 15	*0.3
Provincetown . . . . .	+0 15	-0.3	Jacksonville . . . . .	-0 40	*0.1
Scituate . . . . .	-0 05	-0.5	Miami . . . . .	-3 00	*0.3
Wellfleet . . . . .	+0 20	+0.6	Palm Beach . . . . .	-3 20	*0.3
Woods Hole . . . . .	-3 01	*0.2	Port Everglades . . .	-2 15	*0.3
<b>RHODE ISLAND</b>			St. Augustine . . . .	-2 20	*0.5
Block Island . . . . .	-3 21	*0.3	St. Petersburg . . . .	+3 58	*0.2
Narragansett Pier . . .	-3 31	*0.4	<b>WASHINGTON</b>		
Newport . . . . .	-3 31	*0.4	Ilwaco . . . . .	+1 44	-3.5
Providence . . . . .	-3 11	*0.5	Port Townsend . . . .	+5 04	*0.5
Watch Hill . . . . .	-2 06	*0.3	Seattle . . . . .	+5 37	-2.0
<b>CONNECTICUT</b>			<b>OREGON</b>		
Long Island Sound . . .	-0 02	*0.7	Astoria . . . . .	+1 37	-3.3
New London . . . . .	-1 47	*0.3	Cape Arago . . . . .	+1 19	-4.8
<b>NEW YORK</b>			Yaquina Head . . . .	+1 12	-3.7
Coney Island . . . . .	-3 00	*0.5	<b>CALIFORNIA</b>		
Long Beach . . . . .	-3 57	*0.5	Catalina Island . . . .	-1 33	-5.9
Long Island Sound . . .	+0 08	*0.7	Crescent City . . . . .	+0 56	-5.0
New York City . . . . .	-2 50	*0.5	Eureka . . . . .	+1 20	-5.0
Ocean Beach . . . . .	-3 57	*0.4	Long Beach . . . . .	-1 37	-5.5
Southampton . . . . .	-3 22	*0.3	Monterey . . . . .	-0 03	*0.4
<b>NEW JERSEY</b>			Point Mendocino . . .	+0 24	*0.4
Atlantic City . . . . .	-3 57	*0.5	San Diego . . . . .	-1 35	-5.9
Bayside . . . . .	-0 24	*0.6	San Francisco . . . . .	+0 59	*0.4
Cape May . . . . .	-3 37	*0.5	Santa Barbara . . . . .	-1 19	-6.0
Ocean City . . . . .	-3 17	*0.4	Santa Cruz . . . . .	+0 08	*0.4
Seabright . . . . .					
to . . . . .	-3 44	*0.5			
Seaside Park . . . . .					

## TECHNICALLY SPEAKING

Sunrise and sunset in the OFA are for the visible rising and setting of the sun's upper limb across the unobstructed horizon by an observer whose eyes are fifteen feet above ground level.

Twilight begins or ends when stars of the sixth magnitude disappear or appear at the zenith—or the sun is appr. 18 degrees below the horizon.



## 1943-4 GAME LAWS

Open seasons include both dates. "Rabbit" includes hare; "quall" includes "partridge" in South; "grouse" includes Canada grouse, sharptailed, ruffed (known as partridge in North and pheasant in South) and all other members of family, except prairie chickens, ptarmigan and sage hens. States marked (\*) did not have complete laws available at press time. VERIFY these tables — we can not guarantee them.

♂ males only. \*Season not announced. †Local exceptions.

State and Species	Seasons	Limits, Season	State and Species	Season	Limits, Season
<b>Alabama</b>			<b>Delaware*</b>		
Deer	Nov. 20-Jan. 1 ♂	3	Rabbit	Nov. 15-Dec. 31	
Bear	No open season		Squirrel	Sept. 15-Nov. 1	
Rabbit	Oct. 1-Feb. 20		Quall	Nov. 15-Dec. 31	
Squirrel	{N-Oct. 1-Jan. 1		Pheasant	Nov. 15-Dec. 31 ♂	6
Quall	{S-Oct. 15-Jan. 15				
Pheasant	Nov. 14-Feb. 20		<b>Florida*</b>		
Turkey	{Nov. 20-Jan. 1† ♂	5	Deer	Nov. 20-Dec. 31† ♂	2
	{Mar. 20-Apr. 15† ♂		Squirrel	Nov. 20-Feb. 15†	
			Quall	Nov. 20-Feb. 15†	
<b>Alaska</b>			Grouse, pheasant	No open season	
Deer	Sept. 16-Nov. 15† ♂	2†	Turkey	Nov. 20-Feb. 15†	5
	{N-Sept. 1-Sept. 30 ♂				
Moose	{Dec. 1-Dec. 31	1			
	{S-Nov. 16-Jan. 15 ♂		<b>Georgia*</b>		
Bear	Sept. 1-June 20	2†	Deer	Nov. 15-Jan. 5† ♂	2
Caribou	{Sept. 1-Sept. 30	2†	Bear	Nov. 20-Feb. 28	
	{Dec. 1-Dec. 31		Squirrel	Oct. 1-Jan. 15†	
Mountain goat	Sept. 16-Nov. 15†	2	Quall	Nov. 20-Mar. 1	
Mountain sheep	N-Sept. 1-Sept. 30	2†	Grouse, ph's†	No open season	
Grouse	Sept. 1-Jan. 31		Turkey	Nov. 20-Mar. 1†	2
Ptarmigan	Sept. 1-Jan. 31		Rabbit	No closed season	
<b>Arizona*</b>			<b>Idaho</b>		
Deer	{N-Oct. 16-Nov. 15 ♂	1	Deer, elk	Local seasons	1
Bear	{S-Nov. 1-Nov. 30† ♂	1	Antelope	Local seasons	
Elk	Oct. 16-Nov. 15†	1	Bear	Jan. 1-Dec. 31†	1
Rabbit	Nov. 1-Nov. 30† ♂		Goat	Oct. 10-Oct. 25†	1
Abert Squirrel	Nov. 1-Jan. 31†		Sheep	No open season	
Quall	Aug. 16-Nov. 15†		Quall (Bob-		
Grouse, pheasant	Nov. 21-Dec. 20†		white)	Local seasons	
Turkey	No open season	2	Quall (others)	Oct. 24-Nov. 21†	
Antelope	Oct. 16-Nov. 15†	1	Grouse	Sept. 7-Sept. 28†	
	By Permitt† ♂		Prairie chicken	No open season	
			Hun. partridge	Local seasons	
<b>Arkansas</b>			Sage hen	Local seasons	
Deer	{Nov. 11-Nov. 15† ♂	1	Pheasant	Local seasons	
Bear	{Dec. 9-Dec. 13† ♂				
	{No open season		<b>Illinois*</b>		
Squirrel	{May 15-June 15†		Deer	No open season	
Quall	{Oct. 1-Jan. 1†		Rabbit	Nov. 10-Jan. 15	
Prairie chicken, pheasant	{Dec. 1-Jan. 31		Squirrel	Aug. 1-Nov. 15†	
Turkey	No open season		Quall	Nov. 10-Dec. 10	
	Apr. 1-Apr. 15 ♂	2	Pheasant	Nov. 10-Nov. 19 ♂	
			Turkey, grouse	No open season	
<b>California</b>			<b>Indiana</b>		
Deer	Aug. 1-Nov. 15† ♂	2†	Deer	No open season	
Antelope (by permit)	May 20-Sept. 30 ♂	1	Rabbit	Nov. 10-Jan. 10	
Bear	Oct. 15-Dec. 31†	2	Squirrel	Aug. 10-Oct. 8	
Rabbit	Nov. 15-Dec. 31†		Quall	Nov. 10-Dec. 20	
Squirrel	No open season		Grouse	No open season	
Quall	Nov. 15-Dec. 31†		Prairie chicken	No open season	
Grouse	No open season		Pheasant	Nov. 10-Nov. 19 ♂	
Pheasant	Nov. 27-Dec. 11 ♂		Hun. partridge	Nov. 10-Dec. 20	
Turkey	No open season		Turkey, chukar partridge	No open season	
<b>Colorado</b>			<b>Iowa*</b>		
Deer	Oct. 9-Nov. 7† ♂	1	Deer	No open season	
Elk	Oct. 9-Nov. 15† ♂	1	Rabbit	Aug. 1-Mar. 1	
Antlerless deer and elk by permit	Special seasons		Squirrel	Sept. 15-Nov. 15	
Bear	Oct. 1-Nov. 30	1	Pheasant	Nov. 12-Nov. 14† ♂	
Sheep	No open season		Quall	Nov. 15-Dec. 15	
Quall	Nov. 14-Nov. 30† ♂		Prairie chicken	No open season	
Grouse	No open season		Hungarian partridge	Nov. 12-Nov. 14†	
Prairie chicken	No open season				
Sage hen	No open season				
Pheasant	Nov. 14-Nov. 30† ♂				
Rabbit	Oct. 1-Feb. 1				
<b>Connecticut</b>			<b>Kansas</b>		
Deer	No open season		Deer	No open season	
Rabbit	Nov. 1-Dec. 31	30	Squirrel	June 15-Nov. 30	
Squirrel	Oct. 23-Nov. 27	30	Quall	Nov. 20-Nov. 30	25
Quall	No open season*		Grouse	No open season	
Pheasant	Oct. 23-Nov. 27	15	Pheasant	Nov. 8-Nov. 14† ♂	6
Grouse	Oct. 23-Nov. 27	15	Prairie chicken	Oct. 21, 22	
Hungarian partridge	No open season				

<b>Kentucky</b>				<b>Montana</b>			
Deer	No open season			Deer	Oct. 15-Nov. 15† ♂	1	
Rabbit	Nov. 24-Jan. 9			Bear	Sept. 15-Oct. 15†	1	
Squirrel	Aug. 15-Oct. 31			Elk	Oct. 15-Nov. 15†	1	
Quail	Nov. 24-Jan. 9			Goat	Local seasons†	1	
Grouse, pheasant, turkey	No open season			Sheep	No open season		
				Caribou	No open season		
				Grouse			
<b>Louisiana</b>				Quail, turkey	} Dates not set		
Deer	Nov. 15-Jan. 1 ♂	2		Sage hen			
Bear	Nov. 1-Jan. 1	2		Hun. partridge			
Rabbit	Oct. 1-Mar. 1	120		Pheasant			
Squirrel	Oct. 1-Jan. 15	120					
Quail	Dec. 1-Feb. 20			<b>Nebraska*</b>			
Pheasant, turkey	No open season			Deer	No open season		
				Rabbit	No closed season		
<b>Maine</b>				Squirrel	Oct. 15-Dec. 31		
Deer	Local seasons	1		Quail, grouse, prairie chicken, turkey			
Moose	No open season			Pheasant	No open season* {Oct. 15-Nov. 2† ♂ {Nov. 19-Nov. 30† ♂		
Bear	No closed season						
Rabbit	Oct. 1-Feb. 28†			<b>Nevada*</b>			
Squirrel	Oct. 1-Oct. 31			Deer	Oct. 4-Nov. 2 ♂	1	
Pheasant	Nov. 1-Nov. 14	12		Rabbit	Nov. 1-Dec. 31†		
Grouse	Oct. 1-Nov. 15			Quail	} Oct. 11-Oct. 25† Aug. 3-4†*		
				Pheasant			
<b>Maryland</b>				Sage hen			
Deer	Dec. 6-Dec. 11† ♂	1		<b>New Hampshire</b>			
Rabbit	Nov. 15-Dec. 31†			Deer	Dec. 1-Dec. 21†	1	
Squirrel	{Sept. 15-Oct. 15 {Nov. 15-Dec. 31†			Bear	No closed season		
Quail	Nov. 15-Dec. 31†	6		Rabbit, hare	Oct. 1-Feb. 15		
Grouse	Nov. 15-Dec. 31†	6		Squirrel	Oct. 1-Nov. 1		
Pheasant	Nov. 15-Dec. 31† ♂	6		Quail	Oct. 1-Oct. 31		
Turkey	Nov. 15-Dec. 31†	4		Grouse	Oct. 1-Dec. 1	25	
				Pheasant	Nov. 1-Nov. 16† ♂	4	
<b>Massachusetts</b>				<b>New Jersey</b>			
Deer	Dec. 7-Dec. 11 †	1		Deer	Dec. 17-Dec. 21 ♂	1	
Rabbit, hare	Oct. 20-Feb. 15†			Rabbit, squirrel	Nov. 10-Dec. 15		
Squirrel	Oct. 20-Nov. 20	15		Quail	Nov. 10-Dec. 15†		
Quail	Oct. 20-Nov. 20†	20		Grouse	Nov. 10-Dec. 15	30	
Grouse	Oct. 20-Nov. 20	15		Pheasant	Nov. 10-Dec. 15 ♂		
Pheasant	Oct. 20-Nov. 20	6 ♂		<b>New Mexico</b>			
				Deer	Nov. 11-Nov. 21† ♂	1	
<b>Michigan</b>				Elk	Nov. 11-Nov. 21† ♂	1	
Deer	Nov. 15-Nov. 30† ♂	1		Bear	Nov. 11-Nov. 21†	1†	
Deer (bow & arrow)	Nov. 1-Nov. 14	1		Goat, sheep	No open season		
Bear	Nov. 15-Nov. 30†	1		Antelope	Shooting by permit† ♂		
Rabbit	{U-Oct. 1-Mar. 1 {L-Oct. 15-Jan. 31†	50		Quail (ex. bob-white & Mearns')	Sept. 18-Sept. 22	48	
Squirrel	L-Oct. 15-Nov. 5	25		Blue grouse	No open season		
(fox and gray)	U-Oct. 1-Oct. 20	25		Prairie chicken	No open season		
Grouse, prairie chicken	{L-Oct. 15-Nov. 5† {L-Oct. 15-Nov. 5†	25		Pheasant	Oct. 24-Oct. 26† ♂	2	
Pheasant	{U-No open season {L-Oct. 15-Nov. 5†	6		Turkey	Nov. 11-Nov. 21†	5	
Quail and turkey	No open season			Squirrel	Nov. 11-Nov. 21	2	
Woodchuck	L-Oct. 15-Jan. 31			<b>New York</b>			
				Deer	Oct. 20-Nov. 30† ♂	1	
<b>Minnesota*</b>				Bear	Nov. 1-Nov. 30†	1	
Deer	Nov. 15-Nov. 25†			Rabbit	Oct. 18-Jan. 31†		
Bear	Nov. 15-Nov. 25†			Squirrel	Oct. 18-Nov. 15		
Squirrel	Oct. 15-Dec. 31			Quail	No open season		
Prairie Chicken, sh'tail grouse	Sept. 19-Sept. 28†			Grouse	Dates not set		
Grouse	{Sept. 25-Nov. 21† {Oct. 31-Nov. 16†			Pheasant	Oct. 18-Oct. 30 ♂	6	
Quail	Oct. 17-Nov. 8			<b>Long Island</b>			
Pheasant	Oct. 17-Oct. 25†			Deer	No open season		
Hun. partridge				Rabbit, squirrel	Nov. 1-Dec. 31		
				Quail	Nov. 1-Dec. 31	40	
<b>Mississippi</b>				Grouse	Nov. 1-Dec. 31*	15	
Deer	{Nov. 25-Dec. 1† {Dec. 25-Jan. 1†	1		Pheasant	Nov. 1-Dec. 31 ♂	30	
Bear	No open season			<b>North Carolina*</b>			
Rabbit	No closed season			Deer	Oct. 1-Jan. 1† ♂	3	
Squirrel	Local seas. 5 zones			Bear	Oct. 1-Jan. 1†	2	
Quail	Dec. 10-Feb. 20			Rabbit	Nov. 25-Feb. 10		
Grouse, pheasant	No open season			Squirrel	Oct. 1-Jan. 15†		
Turkey	Apr. 1-Apr. 20 ♂	1		Quail	Nov. 25-Feb. 10	150	
				Grouse	Nov. 25-Jan. 1*	10	
<b>Missouri</b>				Turkey	Nov. 25-Feb. 10	3	
Deer	No open season			Russian boar	Oct. 20-Jan. 1†	2	
Squirrel	June 1-Oct. 31			<b>North Dakota</b>			
Quail	Nov. 10-Dec. 31			Deer	No open season		
Turkey	No open season			Quail	No open season		
Grouse, prairie chicken	No open season			Pheasant (All)	Sept. 25-Oct. 24†		
Pheasant	Nov. 10-Dec. 31†			Pheasant	Dates not set		
Rabbits, groundhogs	Nov. 10-Dec. 31			Hun. partridge	Sept. 25-Nov. 20†		

<b>Ohio</b> Deer Rabbit Squirrel Quail Pheasant Hun. partridge Grouse	No open season Nov. 19-Jan. 11 Sept. 15-Sept. 30† No open season Nov. 19-Dec. 4 ♂ Nov. 19-Dec. 4 Nov. 19-Dec. 4		<b>Utah</b> Deer Elk (By permit) Grouse, sage hen, prairie chicken {Pheasant Quail	Oct. 16-Oct. 26† ♂  No open season Oct. 30-Nov. 4	1 1   4
<b>Oklahoma</b> Elk Squirrel Quail Prairie chicken Pheasant, turkey	No open season May 15-Jan. 1 Nov. 20-Jan. 2† No open season No open season		<b>Vermont</b> Deer Squirrel Rabbit Quail Grouse Pheasant	Nov. 21-Nov. 30† ♂ Oct. 1-Oct. 31 Oct. 1-Feb. 23 Oct. 1-Oct. 31 Oct. 1-Oct. 31 Oct. Sat. & Wed.	1   25 25 4
<b>Oregon</b> Deer Elk Antelope Mountain goat Mountain sheep Squirrel Quail Grouse Pheasant Hun. partridge Prairie chicken, sage hen, turkey	Oct. 1-Nov. 31 ♂ Oct. 26-Nov. 30 Sept. 18-Oct. 3 No open season Sept. 15-Oct. 20 Oct. 16-Nov. 7† No open season	1 1 1         1	<b>Virginia*</b> Deer Bear Elk Rabbit Squirrel Quail Grouse Pheasant Turkey	Nov. 20-Jan. 1† ♂ Nov. 20-Dec. 31† Nov. 9, 10, 11 Nov. 20-Jan. 20† {Sept. 1-Sept. 15 {Nov. 20-Jan. 20 {E-Nov. 20-Jan. 20 {W-Nov. 20-Jan. 5 Same as quail†	1 1 1 75 75 125 15 20† 4†
<b>Pennsylvania</b> Deer Bear Rabbit Squirrel Quail Ruffed grouse Pheasant Turkey Hun. partridge Woodchuck	Nov. 30-Dec. 12 ♂ Nov. 18-Nov. 21 Oct. 31-Nov. 28 Oct. 31-Nov. 28 Oct. 31-Nov. 28 Oct. 31-Nov. 28 ♂ Oct. 31-Nov. 28† Oct. 31-Nov. 14† July 1-Sept. 30	1 1 20 20 15 10 12 1 1 8	<b>Washington*</b> Deer Bear Elk Rabbit Squirrel Grouse Quail Pheasant Hungarian partridge	Oct. 24-Oct. 25† ♂ {E-Oct. 4-Oct. 25† {W-Oct. 4-Jan. 31† Nov. 1-Nov. 11† ♂ Oct. 18-Feb. 28† Oct. 1-Oct. 31† Oct. 4, 5, 11† Oct. 18-Nov. 8†	1 1 2 1    50 15♂ 25
<b>Rhode Island</b> Deer Rabbit Hare Squirrel Quail Grouse Pheasant	No open season Nov. 1-Dec. 31 Nov. 1-Dec. 31 Nov. 1-Dec. 31 Nov. 1-Dec. 31 Nov. 1-Dec. 31† Nov. 1-Dec. 31 ♂		<b>West Virginia*</b> Deer Rabbit Squirrel Quail Grouse Turkey Pheasant	Nov. 30-Dec. 3 ♂ Nov. 11-Jan. 9 Oct. 15-Nov. 28 Nov. 11-Dec. 19† Oct. 15-Dec. 12† Oct. 15-Nov. 21† Nov. 11-Nov. 28† ♂	1 24 24 42 15 1 5
<b>South Carolina</b> Deer Rabbit Squirrel Quail Grouse Turkey	Aug. 15-Jan. 1† ♂ Sept. 1-Mar. 1† Sept. 1-Mar. 1† Nov. 25-Mar. 1† No open season Nov. 25-Mar. 1† ♂	5   20	<b>Wisconsin</b> Deer Deer (bow & arrow) Bear Moose Rabbit, bare Squirrel Grouse Prairie chicken Pheasant Hun. partridge Quail	Nov. 21-Nov. 29† ♂ Oct. 10-Nov. 10† Nov. 21-Nov. 29† No open season Oct. 31-Jan. 15† Oct. 17-Nov. 15 Sept. 19-Nov. 15 Oct. 17-Nov. 15† {Oct. 17-Nov. 15† Nov. 11-Nov. 15†	1 1 1        1
<b>South Dakota</b> Deer Antelope, sheep Quail Grouse, prairie chicken Pheasant Hun. partridge	Nov. 1-Nov. 20† ♂ No open season No open season No open season Sept. 26-Dec. 24† Sept. 26-Oct. 25†	1	<b>Wyoming</b> Deer Moose Elk Bear Sheep Antelope Quail Prairie chicken Grouse Pheasant Sage hen Hun. partridge	Local season ♂ Local seasons ♂ Local season ♂ Local seasons Local seasons† ♂ Local seasons† No open season No open season No open season Oct. 1-Nov. 30† ♂ No open season Oct. 3-Oct. 8†	1 1 1 1 1 1    1 1
<b>Tennessee</b> Deer Bear Rabbit Squirrel Quail Grouse Turkey Wild boar	Special seasons Special seasons Nov. 25-Jan. 25 Aug. 1-Dec. 31† Nov. 25-Jan. 25 Nov. 25-Jan. 25 No open season† Special seasons	1†			
<b>Texas</b> Deer Bear Peccary Squirrel Quail Grouse, pheasant Prairie chicken Turkey	Nov. 16-Dec. 31† ♂ Nov. 16-Dec. 31 Nov. 16-Dec. 31† {Oct. 1-Dec. 31† {May 1-July 31† Dec. 1-Jan. 16† No open season No open season Nov. 16-Dec. 31† ♂	2† 1 2 2 2 3			



## MIGRATORY GAME BIRDS — UNITED STATES

### DUCK, GOOSE, BRANT AND COOT

**Northern Zone, Sept. 25-Dec. 3** — Maine, Michigan, Minnesota, Ohio, Montana, New Hampshire, North Dakota, Pennsylvania, South Dakota, Vermont, Wisconsin and Wyoming.

(Scoters or sea coots may also be taken in open coastal waters of Maine and New Hampshire from Sept. 15 to Sept. 30, and in those of New York, Connecticut, Massachusetts and Rhode Island, Sept. 15-Oct. 15.)

**Intermediate Zone, Oct. 15-Dec. 23** — California, Colorado, Connecticut, Idaho, Illinois, Indiana, Kansas, Kentucky, Massachusetts, Missouri, Nebraska, New Jersey, Nevada, New York, Oklahoma, Oregon, Rhode Island, Utah, Washington and West Virginia.

**Southern Zone, Nov. 2-Jan. 10** — Alabama, Arkansas, Arizona, Delaware, New Mexico, Florida, Georgia, Louisiana, Maryland, Mississippi, North and South Carolina, Tennessee, Texas and Virginia.

**Alaska** — Two zones: Sept. 1-Nov. 9 and Sept. 21-Nov. 29.

**Puerto Rico** — Dec. 15-Feb. 12.

### WOODCOCK

Northern New York, Pennsylvania and Wisconsin — Oct. 1-Oct. 15.

Southern New York (except Long Island), West Virginia and Indiana — Oct. 15-Oct. 29.

Long Island of New York, New Jersey and Rhode Island — Nov. 1-Nov. 15.

Maine, New Hampshire, Ohio, and Vermont — Oct. 10-Oct. 24; Massachusetts — Oct. 20-Nov. 3; Arkansas and Oklahoma — Dec. 1-Dec. 15; Louisiana and Mississippi — Dec. 15-Dec. 29; Delaware and Maryland — Nov. 15-Nov. 29.

Michigan (Upper Peninsula) — Oct. 1-Oct. 15; remainder of state Oct. 15-Oct. 29.

Minnesota — Oct. 3-Oct. 17.

Missouri — Nov. 10-Nov. 24.

Virginia — Nov. 20-Dec. 4; West Virginia — Oct. 17-Oct. 31.

Connecticut — Oct. 16-Oct. 30.

### RAIL AND GALLINULE

Sept. 1-Nov. 30, except as follows: Alabama — Nov. 20-Jan. 31; Louisiana — Sept. 15-Dec. 15; Maine and Wisconsin — Sept. 25-Dec. 3; Massachusetts and New York — Oct. 15-Dec. 23; Minnesota — Sept. 16-Nov. 30; Puerto Rico — Dec. 15-Feb. 12.

No open season in California, District of Columbia, Hawaii, Idaho, Iowa, Montana, Nevada, Oregon, Washington, Tennessee.

### MOURNING DOVE

Alabama, Georgia, Louisiana, Mississippi and South Carolina — Nov. 20-Dec. 19.

Arizona, California, Colorado, Kansas, Nevada, New Mexico and Oklahoma — Sept. 1-Oct. 12.

Delaware, Arkansas, Tennessee, Kentucky, Maryland, and Virginia — Sept. 16-Oct. 15;

Idaho — Sept. 1-Sept. 10; Illinois and Missouri — Sept. 1-Sept. 30; Minnesota Sept. 16-Sept. 30; Oregon — Sept. 1-Sept. 15; North Carolina — Nov. 25-Dec. 24.

Florida — Dec. 1-Dec. 30.

Texas, in Yoakum, Terry, Lynn, Garza, Kent, Stonewall, Haskell, Throckmorton, Young, Palo Pinto, Van Zandt, Rains, Red River counties and in Parker, Kaufman, Johnson, Hopkins, Franklin and Ellis counties and all counties north thereof — Sept. 1-Oct. 12; remainder of state, Sept. 16-Oct. 27.

### WHITE-WINGED DOVE

Arizona — Sept. 1-Sept. 15.

Texas — Sept. 13-Sept. 19.

### BAND-TAILED PIGEON

Arizona, New Mexico and Washington — Sept. 16-

Oct. 15; California — Dec. 1-Dec. 30; Oregon — Sept. 1-Sept. 30.

**BAG LIMITS.** Ducks — 10 in aggregate of all kinds including in such limit not more than 1 wood duck, or more than 3 singly or in the aggregate of redheads and buffheads. Possession limit 20 in the aggregate of all kinds, but not more than 1 wood duck, nor more than 6 of either or both of redheads or buffheads. Geese and brant, 2 in aggregate, but in addition 4 blue geese may be taken in a day. If blue geese only are taken, the daily bag limit is 6. Possession limit on geese, other than blue geese, 4 a day, but in addition 2 blue geese are allowed, and if only blue geese are taken, the possession limit is 6. In Alexander County, Ill., geese may be taken only between sunrise and 12 o'clock noon. Coot and sora 25 singly or in aggregate, daily and possession. Rail end gallinule 15 in aggregate; 15 possession. Woodcock 4; 8 in possession. Mourning and white-winged doves 10. Band-tailed pigeons 10; possession 10.

**RESTRICTIONS.** Closed season on jacksnipe, Ross's geese and swans; on snow geese in states bordering the Atlantic Coast, in Idaho, and in Beaverhead, Gallatin and Madison Counties in Montana. Live decoys, baiting, and use of livestock as "blinds" prohibited. Migratory waterfowl may be taken with bow and arrow, or with shotgun not larger than 10-gauge, and not capable of holding more than 3 shells. All waterfowl, coot, rails, gallinule woodcock, mourning and white-winged doves and band-tailed pigeons may be taken from one-half hour before sunrise to sunset. Federal duck stamp required of all waterfowl hunters over 16 years. Migratory birds may be retained for 45 days following close of season in state where killed.

**IMPORTANT: LEARN, MEMORIZE, AND OBSERVE DAY TO DAY MILITARY REGULATIONS AT ALL TIMES.**

## PLANTING TABLE

There is not much to be gained by "rushing the season" with your Spring planting. Hold off planting your tender vegetables and you'll find they'll come just as quickly to maturity—as those planted earlier and retarded by the cold. However, it is well to get your hardier seeds in without delay . . . and spread your plantings through the season as well as you can. Early and late varieties planted at the same time of course give a partial fulfilment of the desired result. There follows a chart you may use as a guide—by correcting it for your locale. (Courtesy U. S. Dept. Agriculture)

Early Spring		Late Spring or Summer		Late Summer or Fall
4-6 wks. before frost free date	2-4 wks. before frost free date	Frost free date	2-6 wks. after frost free date	—6-8 wks. before first freeze
Cabbage plants Lettuce Onions Peas Potatoes Spinach Turnips	Beets Carrots Swiss chard Lettuce Mustard Peas Parsnips Radishes	Beans Beets Sweet corn Squash Tomato plants	Beans, snap Beets Sweet corn	Beets Collards Kale Mustard Spinach Turnips

### AT WHAT AGE WILL YOU BE "OLD"?

Such a question will probably never be answered satisfactorily. Man is as old as he feels—and, to all intents and purposes, as God's child, ageless. With this premise in mind, you may be interested in examining the following table (derived from the February, 1942 issue of *The Scientific Monthly*) giving the average ages at which leaders have succeeded to their positions.

- U. S. Successful Presidential, 55-59. Candidates
- U. S. Unsuccessful Presidential, 55-59. Candidates
- Members English Cabinet, 55-59
- Presidents of Republic other than U.S.A., 55-59
- Hired Rulers of France, 40-79
- Presidents in Office, 55-59
- Chief and Prime Ministers of England, 55-59
- State Governors of U. S., 45-49
- Governors of American Colonies, 65-69
- U. S. Ambassadors, 55-59
- Military Commanders (not American) 40-44
- Naval Commanders (not American), 55-59
- Appointed Justices Supreme Court, 55-59
- Justices serving in Supreme Court, 65-69
- U. S. Cabinet Members, 50-54
- Presidents American Bar Association, 50-54
- Presidents American Medical Association, 60-64
- Founders of Religious Sects, 35-39
- Popes, 80-84
- Presidents of Other Religious Organizations, 80-84
- Presidents of American Colleges & Universities Inaug., 40-44
- Presidents of American Colleges & Universities Serving, 50-54
- Commercial and Industrial Leaders, 55-59

By and large then if any conclusion may be drawn from the above man's finest flower of ability appears in the last half of his fifties.

## CHARADES

1

Who first my last till they the  
bounds exceed,  
Of my whole soon will surely  
stand in need.

2

My first's a term in golfing,  
though in that I'm not much  
versed;  
My first is in my second, when  
my second's in my first.  
And when my whole is in my  
first, my first is in my whole,  
And when my first is in my last,  
we quaff its flowing bowl.

3

My first the dark Senora  
Wields with uncommon grace,  
And blushing hides behind me,  
The beauty of her face.

My second is a schoolboy,  
The first in every game;  
And yet,—you'll scarce believe  
me,—  
'Tis nothing but a name.

My whole is but a fancy,  
A vision or a dream,  
And very seldom—if at all—  
Has my whole form been seen.

4

My first is a country in Asia.  
Change my head, and I am a  
small country of Africa. Behead,  
and I am an ancient name of a  
part of Europe. "Put a head on  
me" and drop the last two letters,  
and I become a celebrated river.  
Change the last letter and I am  
a country in Asia.

5

I am a word of three syllables.  
My first and second form half the  
name of one of the most beautiful  
Oriental languages; my third is  
eaten by some nations, and de-  
tested by others; and my whole  
is the name of a mountain in  
Turkey, celebrated in Scripture  
history by an event that oc-  
curred 1656 years after the crea-  
tion of the world.

6

My first is in battle, but not in  
fight;  
My second is in eve, but not in  
night;

My third is in hearing, but not  
in sight;  
My fourth is in darkness, but  
not in light;  
My fifth is in wrong, and also in  
right;  
My sixth is in red, but not in  
white;  
My seventh is in flee, but not in  
flight;  
My eighth is in read, and also in  
write;  
My ninth is in danger, but not  
in fright.  
My whole is a beautiful tree.

7

My first is in part of your face;  
my second you feel when you  
are cold; my third is a letter;  
and my whole is an animal.

8

My first is refreshing; oh! many  
it's fed;  
My next is a prominent part of  
the head;  
My third lends to beauty its  
power to please;  
My fourth is the very quintes-  
sence of ease;  
My fifth is the head of all species  
of fun;  
My whole is a criminal good peo-  
ple shun.

9

My first has a large throat, and  
sometimes swallows,  
Though never in the winter, I  
believe;  
And sometimes it gets choked,  
and then it follows  
That only active remedies re-  
lieve.

My next you have when anything  
is broken,  
Nor is it often then a welcome  
sight;  
Though sometimes you esteem  
it as a token,  
And give or take it with a  
small delight.

My whole when glowing from a  
light beneath it,  
Seems radiant with a warmth  
it cannot give.  
And helps to emphasize a pleas-  
ant welcome  
In homes where open-hearted  
people live.

The answers to these charades will be found on page 78.



## OLD FASHIONED PUZZLES

### 1. A Plum Pudding\*

Our Christmas would certainly be incomplete

Without a plum pudding, rich, juicy and sweet;

The recipe you will demand, I dare say—

I'll give it at once in a fanciful way:

(1) Take a thousand and one in proportions to suit

And sprinkle it carefully over the fruit;

(2) Now a daisy or rose, and (3) one hundred with love,

(4) The east and the west winds in conflict above;

(5) A Seneca chief taking supper at e'en,

(6) Two tools and some ice, with a small pea between;

(7) And now from Missouri get two pretty girls

Bright, sparkling and lively, blue eyes and soft curls;

(8) A frank kind of fruit with the sound of a bell,

And all these ingredients together mix well;

(9) Now please add two verbs of an opposite meaning,

(10) What the writer of this did at supper this evening;

And milk, eggs and raisins stir well, and I ween,

You'll have a plum pudding that's fit for a queen.

*Aunt Sue*

### 2. How Much Is a Billion?

If you have a billion dollars in five dollar gold pieces and if you're still interested in how many dollars a billion dollars is, place one coin on the ground and pile up as many of its brothers as will reach 20 feet in height; then place numbers of similar coins in close contact, forming a straight line, and making a wall 20 feet high. Imagine two such walls rising parallel to each other and forming, as it were, a long street. It would be necessary to keep on extending these walls for 2,386½ miles till you have used up your billion coins. This will be fun—and now can you tell us (or can you?) if you place the coins singly on the ground forming one continuous

line, and use them all up so doing, how many times will they girdle the earth? You'd be surprised. If you have to halve or quarter that last coin, just send the left overs to the Old Farmer, and thank you very much.

### 3. Do You Know Your Presidents?

(1) Who was the only President to deliver his inauguration address extempore?

(2) Who was the first President to make any political speech in a foreign tongue? (He spoke in German.)

(3) What President was the last surviving signer of the Constitution of the United States?

(4) What President had been known as the "first scientific farmer" of his day?

(5) What month has proven most fatal to our presidents?

### 4

One hundred and one by fifty divide,

And then if a cipher be rightly applied,

And your computation agree with mine,

The answer will be one taken from nine.

### 5. Reversals

1. Take a word meaning to separate, reverse it, and find a snare for vermin. 2. Belonging to animals of a certain kind; reversed to barter. 3. A pest to society; reversed a kind of bird. 4. A nocturnal animal; reversed, an appendage to a cap. 5. A modern means of divination; reversed, a mineral. 6. To treat with contempt; reversed, small sweet-cakes. 7. An ancient poet or minstrel; reversed, a color. 8. Departed in haste; reversed, a kind of ware.

### 6. Drop-Letter Puzzle

Every other letter is omitted. N-v-r-o-d-m-w-a-y-u-o-u-r-t-n. (A bit of proverbial advice worth heeding.)

For answers to puzzles turn to page 78.

## POETRY, ANECDOTES AND PLEASANTRIES

### BEWARE

My boy, beware the baby stare  
 Because, if it's a bluff,  
 She knows too much—and if it's  
 not,  
 She doesn't know enough.

### LONGEST NAME?

Dr. George Kempner Young  
 John Shields Genius Gray Mat-  
 thew Wilson Pilson Henderson  
 States Jefferson Davis Confederate  
 States Ambrose Heifner was born  
 Feb. 12, 1862 and died March 29,  
 1906.

### THE SAGE SAYS:

He knows a man who wouldn't  
 tell a lie for nine pence, but he  
 might tell eight lies for a dollar.  
 A gentleman farmer is the fel-  
 ler who makes one blade of grass  
 grow where two grew before.

A pessimist is a man who,  
 when he has a choice of two evils,  
 takes 'em both.

The only difference between  
 firmness and obstinacy is a mat-  
 ter of sex.

The easiest man in the world  
 to bunco is the man who has had  
 just enough success to give him  
 confidence in his own judgment.

### PUNCTUALITY

We look at him with silent awe,  
 The man who's never late.  
 His record is without a flaw,  
 The man who's never late.  
 He's always where he said he'd  
 be,  
 Right on the dot you always see  
 (Proud of his punctualitee)  
 The man who's never late.

And yet he loses lots of time,  
 The man who's never late,  
 Although his promptness is sub-  
 lime,  
 The man who's never late.  
 In fact his life is full of care,  
 For when he turns up anywhere,  
 The man who said he'd meet him  
 there  
 Is usually late.

### STRAIGHT LACED

An old Yankee was smoking in  
 the waiting room of a railroad  
 station when a porter said to  
 him, "Don't you see that notice

on the wall—'No smoking al-  
 lowed'?"

"Sure," said the old fellow,  
 "but how can I keep all your  
 rules? There's another on the  
 wall that says 'Wear Felicia Cor-  
 sets'."

*Neal O'Hara in Boston Traveler*

### LATER NEWS

"Your wife," said the reporter,  
 "and the man with whom she  
 eloped have been found in New  
 York. They were on their way to  
 California, but they lost their  
 money and were stranded there."

"Well?" said the man, quite  
 unmoved.

"Why-er," stammered the re-  
 porter, "we thought you might  
 want the news, and—"

"That is not the news. The  
 news is that I have just sent  
 them enough money to see them  
 through."

### SHREDS AND PATCHES

Though life is made up of mere  
 bubbles,

'Tis better than many aver,  
 For while we've a whole lot of  
 troubles,

The most of them never occur.

\* \* \*

If you would pen some line that  
 men

Would always deem as clever,  
 Oh, mix your ink with so much  
 think

That it must last forever.

\* \* \*

Don't think your lot the worst  
 because

Some griefs your joy assail;  
 There aren't so very many saws  
 That never strike a nail.

*Nixon Waterman  
 from In Merry Mood*

### TO DIG A WELL

Silas Winant returned some  
 summers back from a vacation  
 on the inverted V cow nursery  
 near Saladas, Wyoming.

"Them Westerners," Silas  
 claims, "do have mighty knotty  
 and cantankerous problems. Mike  
 Donovan and his neighbors had  
 just completed digging a well  
 when I arrived. Jim Hollander, the  
 postmaster told me about it in be-  
 tween times of us sitting in front

of the P. O. with old man Kennedy."

"Mike's well is down a hundred and two feet," Hollander said. "He's got no sign of water yet and has quit digging!"

"Trouble likely is," Kennedy suggested, "he's got the opening at the wrong end of the well, likely up at the top. Down at the bottom, where there should be a hole for the water to come in, he's likely got nothing but dirt."

Then Silas, seeing how serious set their faces were, spoke up, "What he should do is turn the well upside down; that'd give him a hole at the bottom where the water would come in."

"No," Hollander insisted, "then he'd have solid dirt on top and how'd he get the water out?"

Kennedy wiped his hand along his overalls. "You got to remember that a well is nothing more nor less than a hole in the ground. If Mike turned it upside down, he'd have a hole sticking up in the air for a hundred and two feet. How could you get any water into a thing like that?"

Silas was silent half a minute. "You're just considering the matter from one point of view," he suggested. "If Mike took hold of his well at the bottom instead of the top and turned it upside down, then he'd have a hole down two hundred and four feet. He'd likely get plenty of water at that depth."

"Yeah," Hollander conceded, "but then he'd have a hundred and two feet of dirt above the top of his well and he'd have to dig through that to get the water out."

"The thing to do," Kennedy cut in, "is to take hold of the well in the middle and turn it so there'll be a hole at the bottom—but I guess that brings us back where we started and we still ain't got any water."

Silas says they never did get the thing straightened out—and Mike's well was dry when he left.

Vernon A. Twice  
from Yankee

### MIGHT BE

Little Roger came home from Sunday school with a mite box.

"Why do they call it a mite box, mother?" he asked.

"Because," chirped in his brother, "you might put something in it and you might not."

### CONFESSION OF A PROGNOSTICATOR

As many readers of the almanac have followed the weather

prognostications of Mr. Weatherwise . . . and none has ever been able to squeeze out of him his methods, it may be of interest to record here a note we recently ran across among the buried papers of one Abraham Weatherwise written in the year of our Lord, 1783, in which Abraham discloses all.

"When I arrived at the years of maturity, I endeavoured to cultivate every science that could render me beneficial to my neighbours. But what principally attracted my attention was the study of Astronomy. . . . By my observation of the Planets I discovered that calamity or misery seldom afflicts any people, but Saturn has a strong hand in it: Peace, prosperity and plenty proceed in a natural way from the influence of Jupiter: Wars and rumors of wars from Mars and the Sun. . . . &c.

Having thus devoted my time to the study of the heavenly bodies, I was solicitous to communicate my observations to my neighbours, who, for a number of years have acknowledged them to be accurate. I likewise found that I could be very serviceable to them by my knowledge of Astronomy, in discovering changes of weather; and at length I became such an adept at that science, that before they began to plant, sow, mow, reap, or undertake a journey, they came to consult me about the weather, which so seldom failed of happening according to my prognostication, that they often exclaimed, that I was very wise with respect to the weather. And it happened at a large and social meeting, they honoured me with the title of MR. WEATHERWISE, which I continue to hold to this day.

Thus readers, for to give you still content,

I every year on pleasing am bent:  
And this I'll boast (if you will justify)

In my predictions there's not a lye!

And where is found that bold Astrologer,

That of his Writings can this Truth aver?"

L. K. Williamson

EDITOR'S NOTE: Mr. Weatherwise, of the 1944 generation—after seeing the above, commented it would be of no value to the enemy, he guessed, and has not mentioned it since.



## THE AMAZING DISCOVERY OF NOAH'S ARK

*(An enterprising editor and publisher, H. L. Harvey, Fair Grove, Mo., has presented accounts this past year of three different discoveries of the Ark built by Noah at the command of God as given in Genesis 6, 7, and 8. The following is a summary of his accounts.)*

According to a Chicago Tribune story under dateline of August 13, 1883, certain Turkish commissioners investigating the question of avalanches on Mt. Ararat suddenly "came upon a gigantic structure of very dark wood protruding from a glacier . . . . An Englishman among them saw it was made of ancient gopher wood . . . which grows only on the plains of the Euphrates . . . The admiralty requirement for the conveyance of forces had been carried out, and the interior was divided into partitions fifteen feet high. Into three of these only could they get and how far the Ark extended they could not tell."

In the book "Yesterdays in Persia and Kurdistan" by the Rev. Frederick G. Coan, published at Claremont, California, in 1939, Chapter 16 reveals that a certain Indian "Archdeacon Nouri" . . . "said he had made three attempts to scale Mt. Ararat before he succeeded. At last he was rewarded and he stood overwhelmed and awed as he saw the old ark wedged in the rocks and half filled with snow and ice. He got inside where careful measurements coincided exactly with the account given in the sixth chapter of Genesis." The Rev. Coan did apparently check up on this traveler's life story . . . and found same to be in every respect perfectly reliable.

Vladimar Roskovitsky, a white Russian refugee, now an American citizen engaged in selling Bibles tells of engaging in an aerial trip for the former Russian Government during which he first discovered the Ark on Mt. Ararat . . . and later his Captain confirmed his discovery. The Czar thereupon sent one hundred men to scale the mountain . . . complete measurements were taken and plans drawn of it as well as many photographs taken "all of which were sent to the Czar of Russia."

To quote Roskovitsky: "The Ark was found to contain hundreds of small rooms and some rooms very large with high ceilings. The unusually large rooms had a fence of great timbers across them, some of which were two feet thick . . . as if designed to hold beasts ten times as large as elephants. Other rooms were also lined with tiers of cages somewhat like one sees today at a poultry show, only instead of chicken wire they had rows of tiny iron bars along the front."

". . . The expedition found on the peak of the mountain above the ship, the burned remains of timbers . . . used to build a tiny one room shrine inside of which was a rough stone hearth like the altars the Hebrews use for sacrifices . . . The roof was completely burned off.

"A few days after this expedition sent its report to the Czar, the government was overthrown . . . We white Russians of the air fleet escaped through Armenia, and four of us came to America."

It may be said in this that not any of the reporters of the accounts given by the discoverers of the Ark have committed themselves as to the veracity of these discoveries. As one has put it, however . . . "after the war there will be an abundance of airplanes available for constructive purposes. One of these could locate the Ark, if it is there . . . and the facts proven for the world. The Bible will be no more true than it is now . . . but many scoffers will be put to silence."

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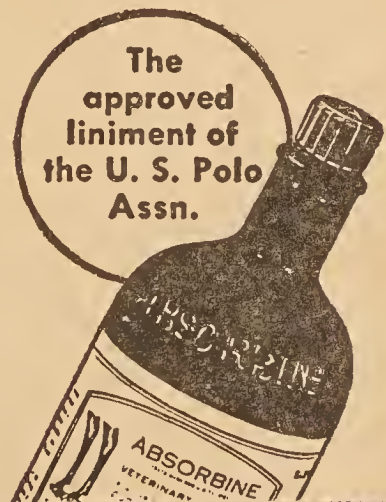
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# B&M

*Genuine Brick Oven*

# BAKED BEANS



# RECIPES FOR TODAY'S RATIONS

By LOUISA PRYOR SKILTON

## BREADS

### Raisin Tea Loaf

- 2 cups all-purpose flour  
3 teaspoons baking powder  
 $\frac{1}{2}$  teaspoon salt  
 $\frac{1}{4}$  cup shortening
- 1 cup corn sirup  
1 egg, unbeaten  
 $\frac{1}{2}$  cup milk  
1 cup raisins, seeded

Sift together flour, baking powder and salt. Cream shortening and add corn sirup; stir in about  $\frac{1}{2}$  cup of flour mixture, then egg, and beat well. Add remainder of flour mixture alternately with milk. Add raisins. Place in loaf pan (13 x 4 $\frac{1}{2}$  x 2 $\frac{1}{2}$ ) and bake in moderate oven (350° F.) for 1 hour.

### Molasses Corn Cake

- 1 cup milk  
1 cup cornmeal  
1 egg, beaten  
 $\frac{1}{2}$  cup molasses  
3 tablespoons shortening, melted
- 1 cup all-purpose flour  
3 teaspoons baking powder  
1 teaspoon salt

Scald milk and pour it over cornmeal, let stand 10 minutes. Stir in egg, molasses and shortening, then flour sifted with baking powder and salt. Place in shallow pan (7 $\frac{1}{2}$  x 11) and bake in moderately hot oven (375° F.) about 25 minutes.

### Honey Filled Biscuits

- 1 egg, slightly beaten  
2 cups all-purpose flour  
3 teaspoons baking powder
- $\frac{3}{4}$  teaspoon salt  
 $\frac{1}{4}$  tablespoons shortening  
 $\frac{1}{2}$  cup milk (or less)

Sift together flour, baking powder and salt; cut in shortening and add egg and milk to make a soft dough. Turn dough onto lightly-floured board and knead just enough to make surface smooth. Roll into rectangle,  $\frac{1}{2}$ -inch thick. Cover surface with Honey Spread and roll like a jelly roll. With sharp knife cut slices 1-inch thick from end of roll; place in greased muffin tins and bake in hot oven (400° F.) 20 minutes.

### Honey Spread

- $\frac{1}{4}$  cup-butter or margarine  
 $\frac{1}{4}$  cup honey
- $\frac{1}{4}$  cup chopped raisins  
 $\frac{1}{2}$  cup chopped walnuts

Blend ingredients thoroughly.

### Chicken Short Cake

- 4 large squares corn bread  
6 tablespoons butter or margarine  
6 tablespoons flour  
2 cups milk
- $\frac{1}{4}$  cup chopped pimento  
 $\frac{1}{4}$  cup chopped green pepper  
2 cups diced cooked chicken
- Salt and paprika

Split corn bread and toast on one side. Make a sauce from butter or margarine, flour and milk; season with salt and paprika. Add pimento, green pepper and chicken. Heat thoroughly and serve between two halves of corn bread and on top of squares. Serves 4.

### Green Pea Timbales

- 2 $\frac{1}{2}$  cups green peas, cooked  
3 eggs, beaten  
1 teaspoon grated onion  
 $\frac{1}{2}$  cup top milk
- 2 tablespoons butter or margarine, melted  
Salt and paprika

Press peas through sieve, add eggs, onion, milk, butter or margarine. Season with salt and paprika. Place mixture in individual greased molds, set in a pan of hot water and bake in moderate oven (350° F.) about 25 minutes. Unmold and serve with tomato sauce. Serves 4 or 5.

### Creamed Eggs and Asparagus on Biscuit Ring

- 4 tablespoons butter or margarine  
4 tablespoons flour  
2 cups milk
- 6 eggs, hard cooked  
1 biscuit ring  
1 large bunch asparagus, cooked
- Salt

Melt butter or margarine, stir in flour and salt; add milk gradually. When mixture thickens place over hot water. Add eggs, sliced. Use to fill center of biscuit ring. Arrange asparagus around outside. Serves 4.

### Spiced Boiled Tongue with Vegetables

- 1 beef tongue, slightly corned  
6 cloves  
2 bay leaves
- 2 tablespoons lemon juice  
Hot water to cover

Scrub tongue, place in kettle with cold water to cover, bring to boiling point slowly; discard water. Add cloves, bay leaves,

lemon juice and hot water. Bring to boiling point, reduce heat and simmer until tender (this requires 3 to 4 hours more). Allow

to cool in cooking water, then remove skin and trim root end. Serve warm with snowball-tur-nips and steamed spinach.

## VEGETABLES

### Fresh Limas in Pimento Sauce

- |   |                                     |
|---|-------------------------------------|
| 2 cups fresh<br>lima beans,<br>shelled  | 1 tablespoon<br>chopped<br>chives   |
| 2 tablespoons<br>butter or<br>margarine | 2 canned pi-<br>mentoes,<br>chopped |
| 2 sprigs pars-<br>ley                   |                                     |

Cook lima beans until tender. Drain. Melt butter in saucepan. Add parsley, chives and pimen-toes, and cook over low heat until well blended. Add lima beans and cook 5 minutes longer. Serves 4.

### Cabbage Relish

- |                                       |   |
|---------------------------------------|---|
| 2 cups<br>chopped<br>raw cab-<br>bage | 2 cups vine-<br>gar                           |
| 1 cup<br>chopped<br>celery            | $\frac{3}{4}$ cup brown<br>sugar              |
| 1 cup<br>chopped<br>carrots           | $1\frac{1}{2}$ teaspoons<br>salt              |
|                                       | $\frac{1}{2}$ teaspoon<br>pepper              |
|                                       | $\frac{1}{4}$ cup grated<br>horse-rad-<br>ish |

Prepare vegetables. Combine vinegar, sugar, salt, pepper and horse-radish and cook 5 minutes. Add vegetables and simmer 10 minutes. Seal in sterile jars or cool and use at once. Makes 3 half-pint jars.

### Cheese Potato Souffle

- |                                    |  |
|------------------------------------|--|
| 2 cups hot<br>mashed po-<br>tatoes | $\frac{1}{2}$ teaspoon<br>pepper               |
| 3 egg yolks,<br>well-beaten        | $\frac{3}{4}$ cup grated<br>American<br>cheese |
| $\frac{1}{2}$ teaspoon salt        | 3 egg whites,<br>beaten stiff                  |

Combine potatoes with egg yolks, salt and pepper. Add half the cheese. Fold in egg whites. Place in greased casserole. Sprinkle remaining cheese over top. Set casserole in pan of hot water. Bake in moderate oven (375° F.) about 25 minutes. Serves 6.

## SALADS

### Fresh Spinach and Egg Salad

- |                                      |                                     |
|--------------------------------------|-------------------------------------|
| 1 pound raw<br>spinach               | $\frac{1}{2}$ cup chopped<br>celery |
| $\frac{1}{2}$ head lettuce           | 6 hard-cooked<br>eggs               |
| 1 medium-<br>sized onion,<br>chopped |                                     |

Wash spinach and lettuce, re-move tough stalks and chop leaves cross-wise. (Roll leaves and snip with scissors if preferred.) Toss in salad bowl with onion and celery. Slice eggs and arrange in ring around edge of bowl. Accompany with Bacon Salad Dressing. Serves 10-12.

### Apple Raisin Salad

- |                                       |                               |
|---------------------------------------|-------------------------------|
| 2 cups shred-<br>ded cabbage          | Cooked<br>Salad Dress-<br>ing |
| 1 cup diced<br>apple, un-<br>pared    | Salt and<br>pepper            |
| $\frac{1}{2}$ cup seedless<br>raisins |                               |

Blend cabbage, apple and rais-ins. Moisten with Cooked Salad Dressing and season with salt and pepper. Very good with roast pork. Serves 6.

### Winter Pears with Orange Dressing

- |               |          |
|---------------|----------|
| 6 Anjou pears | Orange   |
| 1 Bunch cress | Dressing |

Select ripe pears. Cut in quar-ters, remove core and skin. Slice and arrange on nests of cress. Serve with Orange Dressing.

### Orange Dressing

- |                                       |                              |
|---------------------------------------|------------------------------|
| 3 tablespoons<br>sugar                | $\frac{1}{2}$ teaspoon salt  |
| 1 tablespoon<br>flour                 | 1 cup orange<br>juice        |
| $\frac{1}{2}$ teaspoon dry<br>mustard | 4 tablespoons<br>lemon juice |

Combine dry ingredients in top of double boiler, add fruit juices and cook over hot water until mixture thickens. Chill.

## DESSERTS

## Apple Peanut Crispie

- |                           |                         |
|---------------------------|-------------------------|
| 4 tart apples             | 2 tablespoons           |
| $\frac{3}{4}$ cup chopped | sugar                   |
| peanuts                   | $\frac{1}{2}$ teaspoon  |
| 2 tablespoons             | cinnamon                |
| lemon juice               | $\frac{1}{4}$ cup honey |

## Topping

- |                         |                          |
|-------------------------|--------------------------|
| $\frac{1}{4}$ cup flour | $\frac{1}{4}$ cup butter |
| $\frac{1}{4}$ teaspoon  | or margarine, melted     |
| salt                    | $1\frac{1}{2}$ cups corn |
| $\frac{1}{4}$ cup brown | flakes,                  |
| sugar                   | crushed                  |

Pare and core apples, slice and place in oven-glass baking dish 6" x 10", add peanuts. Sprinkle with lemon juice, sugar and cinnamon; pour honey over all. Mix topping and spread over top. Bake in moderately hot oven

(375° F.) about 45 minutes or until apples are tender. Serve warm with light cream. Serves 4-6.

## Fresh Raspberry Sponge with Custard Sauce

- |                |                           |
|----------------|---------------------------|
| 1 tablespoon   | $\frac{1}{4}$ cup confec- |
| gelatine       | tioner's sug-             |
| 2 tablespoons  | ar (or more)              |
| cold water     | 1 can evapo-              |
| 1 cup raspber- | rated milk,               |
| ries, crushed  | chilled                   |

Soften gelatine in cold water; heat over hot water, stirring until dissolved. Add to berries sweetened with sugar. Chill until slightly thickened. Fold in evaporated milk whipped stiff. Place in individual serving dishes and chill. Serve with Custard Sauce. Serves 4 or 5.

## CAKE

## Angel Delicious

- |                          |                         |                        |                        |
|--------------------------|-------------------------|------------------------|------------------------|
| 1 cup sugar              | $\frac{1}{4}$ teaspoon  | $\frac{1}{2}$ teaspoon | 3 egg whites,          |
| $1\frac{1}{3}$ cups cake | salt                    | lemon ex-              | beaten stiff           |
| flour                    | $\frac{2}{3}$ cup milk, | tract                  | $\frac{1}{2}$ teaspoon |
| 3 teaspoons              | scalded                 | $\frac{1}{2}$ teaspoon | cream of               |
| baking                   |                         | vanilla ex-            | tartar                 |
| powder                   |                         | tract                  |                        |

Mix and sift together 4 times the sugar, flour, baking powder and salt. Add milk and flavorings. Fold in egg white beaten with

cream of tartar. Place in ungreased tube pan and bake about 50 minutes in a slow oven (325° F.).

## COOKIES

## Maple Drop Cookies

- |                           |                          |
|---------------------------|--------------------------|
| 2 $\frac{1}{2}$ cups all- | 2 tablespoons            |
| purpose                   | grated                   |
| flour                     | orange rind              |
| $\frac{1}{2}$ teaspoon    | $\frac{1}{2}$ cup butter |
| salt                      | or margarine             |
| 3 teaspoons               | 2 eggs, beaten           |
| baking pow-               | 1 cup maple              |
| der                       | sirup                    |

Sift together flour, salt and baking powder. Cream orange rind with butter and add eggs. Add flour mixture alternately with maple sirup. Drop mixture by spoonfuls on greased baking sheet and bake in moderate oven (350° F.) about 10 minutes. Makes 4 $\frac{1}{2}$  dozen cookies.

## Peanut Butter Cookies

- |                            |                        |
|----------------------------|------------------------|
| $\frac{1}{2}$ cup shorten- | 1 egg                  |
| ing                        | $\frac{1}{2}$ cup milk |
| $\frac{1}{4}$ cup peanut   | 1 cup all-pur-         |
| butter                     | pose flour             |
| $\frac{2}{3}$ cup brown    | 1 teaspoon             |
| sugar (half                | baking pow-            |
| may be                     | der                    |
| white)                     | $\frac{3}{4}$ teaspoon |
| 1 teaspoon                 | salt                   |
| vanilla                    |                        |

Cream shortening, peanut butter, and sugar. Add vanilla and egg and beat well. Add milk alternately with flour sifted with baking powder and salt. Drop from tablespoon onto greased cooky sheet. Bake in moderate oven (375° F.) 12-15 minutes. Makes 2 dozen.

## BEVERAGES

## Molasses Milk Shake

- |              |            |
|--------------|------------|
| 1 tablespoon | 1 cup milk |
| molasses     |            |

Shake together molasses and milk. Serve at once. Serves 1. (Multiply amounts by number to be served.)

## Cafe Au Lait

- |                 |              |
|-----------------|--------------|
| 2 cups hot cof- | 2 cups milk, |
| fee             | freshly      |
|                 | scalded      |

To serve, pour coffee and milk in equal amounts into heated coffee cups.



## FERTILIZE AND BE HEALTHY

That there is a direct relation between health and the soil upon which we live has long been understood. The lime content of certain parts of Northern Vermont soil, for example, has been a major consideration in raising horses. The same might be said of the blue-grass lands in Kentucky. Dr. Ouida Davis Abbott was recently quoted in the New York State Journal of Medicine as saying that:

"In sections where local cattle rangers were classed as deficient in 'salt lick,' the children had lower hemoglobin values than in sections where classed as healthful . . ."

"Children with skeletal imperfections came from sections where cattle also had poor bone formation . . ."

"When produced on soils classified as protected, greens contained from two to three times as much iron as when grown on deficient soils."

Of late years—especially with our increasing knowledge of vitamins and their effect on our health—this subject is receiving greater attention. It is said that experiments have been made in the field of beans grown on the one hand, with natural manure—and on the other hand, with commercial fertilizer. Similarly, others have tried to determine whether or not there was a difference between the vitamin content of eggs produced by the "factory" hen and that from the old time barnyard variety. It has also been said (though we have yet to see any published proof of same) that these experimenters have learned that people who were made ill by the beans grown with commercial fertilizer—and by the eggs from the forced hens—were not made ill by the beans from natural manure or by the eggs from barnyard hens. When and if such experiments are a matter of public record and the results substantiate any such differences in health as suggested here, we may find a deep and profound change will take place in our marketing as well as eating preferences. We may find that stores will come to hitching not only a soil content analysis to their vegetable prices—but a fertilizer analysis as well.

For those scoffers who would consign these experiments to the realm of bedtime stories and poppycock, it might be well to examine here the April 1943 issue of The Journal of the American Society of Agronomy in which appear the writings of J. K. Wilson, Professor of Soil Technology. From the results of this man's experiments and study we quote the following:

"Plants such as beans, pigweed, and watermelon vine may contain 5000 p.p.m. of nitrate in the sap and the sap may represent 85% of the total weight. Thus, it is evident that this nitrate calculated as  $\text{NaNO}_3$  would constitute about 3.88% of the dry weight. The data show that beans grown in the greenhouse and vines of the watermelon contained twice this quantity. According to certain investigators this percentage of nitrate should be lethal to animals. Bradley, *et al*, say, on the basis of their experiments that it is necessary for a five hundred pound animal to eat only  $5\frac{1}{2}$  pounds of hay containing 5% of  $\text{KNO}_3$  to be fatally poisoned."

On the other hand for those canards who might too soon jump at the conclusion that the common run of commercially fertilized vegetables are to be avoided, Professor Wilson has this to say:

"The nitrate content of such vegetables as beets, broccoli, cabbage, cauliflower, lettuce, etc. suggests that these foods may be toxic at times to humans. Undoubtedly some of the nitrate will be reduced to nitrite in the digestive tract and, as such, may be absorbed into the blood where it may produce nitrosohemoglobin. Since more than 50% of the blood must be thus inactivated before toxic conditions are manifest and since humans consume small amounts of such vegetables at any one time it appears unlikely that the nitrate from this source alone will be very often indirectly poisonous to them."

What, we wonder, would be the result of a meeting of the minds of our vitamin experts and our fertilizer authorities on the general subject of how the fertilization of soil might improve our general health and outlook? If the nitrate content of vegetables can be toxic for us, could we not then fertilize with some mineral suited for the improvement of our well being in the days ahead—with some, let us say, cold prevention kind of mineral, for example? Then, instead of beans with a dash of nitrate as our only choice we could perhaps expect an ample portion of bicarbonate and cod liver thrown in besides. Well, who knows, there may be a future in this farming business yet!

## FORECAST YOUR OWN WEATHER

(Continued from The 1943 Old Farmer's Almanack)

with additional apologies to the Censor.

### THE VEGETABLE KINGDOM

The common chickweed or stitchwort (*Stellaria Media*) has a small white flower which, if closed, means rain is close at hand. In dry weather it is regularly open from nine in the morning until noon. So it is with the purple sandwort, and the pimpernel, but don't put too much faith in *Tragopogon pratensis* as this old man always goes to bed at noon — regardless of the weather.

When the African marigold remains closed after eight A.M. or five P.M., rain may be expected.

Many other flower varieties close their petals as rain or night approaches — to uncloset them again after the rain or next morning: germander speedwell, red campion, wood sorrel, Hieraciums, succory, common daisies, winter green, white water lily, etc. If any of the following open later or close earlier than their usual times, watch for rain: Day Lilly (opens at 7 A.M., closes at 7 P.M.); Dandelion (opens at 7 A.M., closes at 8 P.M.); Lettuce (opens at 8 A.M., closes at 9 P.M.)

Plenty of berries — or acorns — mean a severe winter. Thin and delicate onion skins — mean a mild winter.

### THE ANIMAL KINGDOM

Sheep run to and fro, jump from the ground, fight in their gambols, before a change of weather.

When cattle lie out, or pigs lie down for the night without covering themselves with litter, fine weather will continue.

Asses hanging their ears forward, or rubbing themselves against walls or trees, prognosticate rain.

Before rain, dogs are apt to be sleepy and dull and lie all day before the fire.

Cats, remaining indoors, devoid of vivacity, forecast wet or windy weather.

Frogs croaking more than usual, moles throwing up more soil than usual, toads in great numbers, oxen licking their forefeet — mean rain.

When rabbits come out to feed early on a summer's eve, it will rain. In winter, it will rain — or snow — during the night. If it's to be a real bad night, they'll be in their burrows before dark. Catfish develop unusually thick belly skins for a hard winter.

### THE BIRDS

When swans fly the weather will be rough — usually within 12 hours. Early appearance of woodcocks, snipes, and other birds of passage mean a severe winter.

Owls hooting and screeching during bad weather foretell fine weather near at hand.

The mistletoe thrush sings particularly long and loud before rain.

Fowls rolling themselves more than usual in the sand — feel rain — and a cock crowing in the evening or at any unusual hour — has the same feeling.

Songbirds caroling late in the evening mean weather continues fair. Crows croaking indicate good days.

Swallows flying near the ground, robins coming near the house, sparrows chirping a great deal — mean rain or wind. If the kingfisher disappears, expect fine weather.

### INSECTS

Gnats in a column shaped vortex before the setting sun announce it will be fine; up and down, playing in the open air, they presage heat; in the shade, mild showers. If they sting, look for cold weather and much rain.

Garden spiders breaking off their webs and creeping away know the rain is not going to stop.

(Continued on page 56)

(Continued from page 55)

Spider webs, flying in the autumn, mean fine days ahead.

Spiders often will give you a 12-14 day look ahead. Note the terminating filaments of their webs; if unusually short, it will be rainy or windy; if long, expect serene weather for a couple of weeks. Totally indolent, rain will ensue, activity during rain means it will be over soon. If they alter their webs between 6 and 7 P.M. the night will be serene and clear.

Bees stay at home before a rain. Hornets build low nests before cold and early winters.

Ants—the finer the day, the busier they are, and brother, you may be certain that when they retire for what seems to you no good reason at all, you'd better do so too—as a shower is just around the corner.

The leech remains motionless and rolled up in spiral form when it is fair and frosty. Before rain or snow, however, he'll creep up to the top of his container, stay a while if it is to be transient, stay a good deal longer if it's to be of long duration. He darts about if wind is to come along, too, and gets convulsions if a thunderstorm is in the offing.

### MIST

A white mist in the evening over a meadow or river dispersed by the sun next morning means a good day—all day.

Five or six fogs in a row—and you'll have rain.

Mist drawing up toward hill tops in the morning—rolling to the top—predicts good weather, but if it hangs on the hills or drags along the woods, it sure is going to rain.

A general mist before the sun rises is a sign of fair weather.

### DEW

Plentiful on the grass after a fair day—and tomorrow will be fine. If not, and there is no wind, rain will follow.

### SKY COLORS

Red evening portends fair weather—unless spread too far upward from the horizon in which case expect wind or rain or both.

Sea green tinge in rainy weather means more rain—deep blue calls for showers.

Haziness over the sun or moon—a sun white at setting or going into a bank of clouds—foretells bad weather. A pale dim moon means rain. A red moon means wind. Yellow or gold sun—with purple streaks at sunset—all will be fine.

A red predominant in the rainbow means rain or wind; orange for rain; yellow for dry weather; green for rain; blue for fine weather; purple for wind and rain; and violet for fine weather.

EDITOR'S NOTE: *Mr. Weatherwise, from his observations of these things, and others believes the coming winter will certainly be milder than last—and probably than most. (August 1, 1943)*

### THE MOUNT WASHINGTON OBSERVATORY

The Mount Washington Observatory was founded in 1932 as one of the observing stations to participate in the Second International Polar Year, (an effort by different countries to obtain more data than usual for studies of atmospheric circulation, over a period of 13 months.) The immediate value of the observations for forecasting, however, led to a continuation of the Observatory, with later backing of the U. S. Weather Bureau and the State of New Hampshire, as well as several hundred interested individuals. The Observatory is a scientific corporation with membership at \$1.00 a year. News Bulletins including discussions of the amazing weather on Mount Washington are published usually twice a year. The latest is devoted to a summary of the Observatory work for the first ten years.

Anyone interested should communicate with Joseph B. Dodge, Treasurer, Gorham, New Hampshire.



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1	\$0.07	\$0.08	\$0.08	\$0.09	\$0.10	\$0.11	\$0.12	\$0.14	\$0.15
2	.08	.10	.10	.11	.14	.17	.19	.23	.26
3	.08	.11	.11	.13	.17	.22	.26	.32	.37
4	.09	.12	.12	.15	.21	.27	.33	.41	.48
5	.09	.13	.13	.17	.24	.33	.40	.50	.59
6	.10	.14	.14	.19	.28	.38	.47	.59	.70
7	.10	.15	.15	.21	.31	.43	.54	.68	.81
8	.11	.16	.16	.23	.35	.49	.61	.77	.92
9	.11	.17	.17	.25	.38	.54	.68	.86	1.03
10	.12	.18	.18	.27	.42	.59	.75	.95	1.14
11	.12	.19	.19	.29	.45	.64	.82	1.04	1.25
12	.13	.21	.21	.31	.49	.70	.89	1.13	1.36
13	.13	.22	.22	.33	.52	.75	.96	1.22	1.47
14	.14	.23	.23	.35	.56	.80	1.03	1.31	1.58
15	.14	.24	.24	.37	.59	.86	1.10	1.40	1.69
16	.15	.25	.25	.39	.63	.91	1.17	1.49	1.80
17	.15	.26	.26	.41	.66	.96	1.24	1.58	1.91
18	.16	.27	.27	.43	.70	1.02	1.31	1.67	2.02
19	.16	.28	.28	.45	.73	1.07	1.38	1.76	2.13
20	.17	.29	.29	.47	.77	1.12	1.45	1.85	2.24
21	.17	.30	.30	.49	.80	1.17	1.52	1.94	2.35
22	.18	.32	.32	.51	.84	1.23	1.59	2.03	2.46
23	.18	.33	.33	.53	.87	1.28	1.66	2.12	2.57
24	.19	.34	.34	.55	.91	1.33	1.73	2.21	2.68
25	.19	.35	.35	.57	.94	1.39	1.80	2.30	2.79
26	.20	.36	.36	.59	.98	1.44	1.87	2.39	2.90
27	.20	.37	.37	.61	1.01	1.49	1.94	2.48	3.01
28	.21	.38	.38	.63	1.05	1.55	2.01	2.57	3.12
29	.21	.39	.39	.65	1.08	1.60	2.08	2.66	3.23
30	.22	.40	.40	.67	1.12	1.65	2.15	2.75	3.34
31	.22	.41	.41	.69	1.15	1.70	2.22	2.84	3.45
32	.23	.43	.43	.71	1.19	1.76	2.29	2.93	3.56
33	.23	.44	.44	.73	1.22	1.81	2.36	3.02	3.67
34	.24	.45	.45	.75	1.26	1.86	2.43	3.11	3.78
35	.24	.46	.46	.77	1.29	1.92	2.50	3.20	3.89
36	.25	.47	.47	.79	1.33	1.97	2.57	3.29	4.00
37	.25	.48	.48	.81	1.36	2.02	2.64	3.38	4.11
38	.26	.49	.49	.83	1.40	2.08	2.71	3.47	4.22
39	.26	.50	.50	.85	1.43	2.13	2.78	3.56	4.33
40	.27	.51	.51	.87	1.47	2.18	2.85	3.65	4.44
41	.27	.52	.52	.89	1.50	2.23	2.92	3.74	4.55
42	.28	.54	.54	.91	1.54	2.29	2.99	3.83	4.66
43	.28	.55	.55	.93	1.57	2.34	3.06	3.92	4.77
44	.29	.56	.56	.95	1.61	2.39	3.13	4.01	4.88
45	.29	.57	.57	.97	1.64	2.45	3.20	4.10	4.99

Weight in pounds	Local	ZONES							
		1st Up to 50 miles	2d 50 to 150 miles	3d 150 to 300 miles	4th 300 to 600 miles	5th 600 to 1,000 miles	6th 1,000 to 1,400 miles	7th 1,400 to 1,800 miles	8th over 1800 miles
40	.30	.58	.58	.99	1.68	2.50	3.27	4.19	5.10
47	.30	.59	.59	1.01	1.71	2.55	3.34	4.28	5.21
48	.31	.60	.60	1.03	1.75	2.61	3.41	4.37	5.32
49	.31	.61	.61	1.05	1.78	2.66	3.48	4.46	5.43
50	.32	.62	.62	1.07	1.82	2.71	3.55	4.55	5.54
51	.32	.63	.63	1.09	1.85	2.76	3.62	4.64	5.65
52	.33	.65	.65	1.11	1.89	2.82	3.69	4.73	5.76
53	.33	.66	.66	1.13	1.92	2.87	3.76	4.82	5.87
54	.34	.67	.67	1.15	1.96	2.92	3.83	4.91	5.98
55	.34	.68	.68	1.17	1.99	2.98	3.90	5.00	6.09
56	.35	.69	.69	1.19	2.03	3.03	3.97	5.09	6.20
57	.35	.70	.70	1.21	2.06	3.08	4.04	5.18	6.31
58	.36	.71	.71	1.23	2.10	3.14	4.11	5.27	6.42
59	.36	.72	.72	1.25	2.13	3.18	4.18	5.36	6.53
60	.37	.73	.73	1.27	2.17	3.24	4.25	5.45	6.64
61	.37	.74	.74	1.29	2.20	3.29	4.32	5.54	6.75
62	.38	.76	.76	1.31	2.24	3.35	4.39	5.63	6.86
63	.38	.77	.77	1.33	2.27	3.40	4.46	5.72	6.97
64	.39	.78	.78	1.35	2.31	3.45	4.53	5.81	7.08
65	.39	.79	.79	1.37	2.34	3.51	4.60	5.90	7.19
66	.40	.80	.80	1.39	2.38	3.56	4.67	5.99	7.30
67	.40	.81	.81	1.41	2.41	3.61	4.74	6.08	7.41
68	.41	.82	.82	1.43	2.45	3.67	4.81	6.17	7.52
69	.41	.83	.83	1.45	2.48	3.72	4.88	6.26	7.63
70	.42	.84	.84	1.47	2.52	3.77	4.95	6.35	7.74

**EXCEPTIONS**

(a) In the first or second zone, where the distance by the shortest regular practicable mail route is 300 miles or more, the rate is 9 cents for the first pound and 2 cents for each additional pound.

(b) On parcels collected on rural routes the postage is 2 cents less per parcel than shown in the foregoing table when for local delivery and 3 cents less per parcel when for other than local delivery.

(c) Parcels weighing less than 10 pounds measuring over 84 inches, but not more than 109 inches in length and girth combined, are subject to a minimum charge equal to that for a 10-pound parcel for the zone to which addressed.

(d) For special rates on books, and on catalogs and other similar printed advertising matter, consult postmaster.

**Limit of size for parcels** is 100 inches in length and girth combined. Limit of weight is 70 pounds in all zones.

**Library Books.** Books containing no advertising matter other than incidental announcements of books. Catalogs over 8 ounces in weight. Special rates of postage are provided for these items. (Inquire at Post Office.)

**SPECIAL HANDLING. (Fourth Class Matter Only)**

Parcels of 4th-Class Matter entitled "Special Handling" will be given the most expeditious treatment practicable (but not Special Delivery) upon payment, in addition to regular postage: Up to 2 lbs. 10c; Over 2 to 10 lbs. 15c; Over 10 lbs. 20c.

**SPECIAL DELIVERY FEES**

	First Class	Second, Third or Fourth Class
Up to 2 pounds.....	10c	15c
Over 2 pounds up to 10 pounds.....	20c	25c
Over 10 pounds.....	25c	35c

The prepayment of the foregoing fee on second, third, or fourth class mail entitles it to the most expeditious handling and transportation practicable, and also entitles it to special delivery at the office of address.

**To Canada:** United States Special Delivery Fees are applicable on articles prepaid at the letter rate of postage. Newfoundland and Labrador 20c prepaid in addition to regular postage on letters or articles only prepaid at the letter rate... and see p. 64.

**REGISTERED MAIL**

Not to exceed \$5 .....	\$0.15	Not to exceed \$500 .....	\$0.70
Not to exceed 25 .....	.18	Not to exceed 600 .....	.80
Not to exceed 50 .....	.20	Not to exceed 700 .....	.85
Not to exceed 75 .....	.25	Not to exceed 800 .....	.90
Not to exceed 100 .....	.30	Not to exceed 900 .....	.95
Not to exceed 200 .....	.40	Not to exceed 1000 .....	1.00
Not to exceed 300 .....	.50	Registered mail is subject to surcharges under certain conditions.	
Not to exceed 400 .....	.60		

**Insured Mail (third and fourth classes) Fees for indemnity limited to:**

\$5.....	5¢	\$50.....	15¢	\$150.....	30¢
25.....	10¢	100.....	25¢	200.....	35¢

**C.O.D. Mail — Unregistered (third and fourth classes and sealed matter of any class bearing first-class postage) Fees for collections and indemnity limited to:**

\$5.....	12¢	\$50.....	22¢	\$150.....	40¢
25.....	17¢	100.....	32¢	200.....	45¢

**C.O.D. Mail — Registered (sealed matter of any class bearing first-class postage). Consult postmaster for fees and limits of indemnity.**

**POSTAL MONEY ORDERS**

For Orders		For Orders	
From \$0.01 to	\$2.50.... 6 cents	From \$20.01 to	\$40.00.... 15 cents
From \$2.51 to	\$5.00.... 8 cents	From \$40.01 to	\$60.00.... 18 cents
From \$5.01 to	\$10.00.... 11 cents	From \$60.01 to	\$80.00.... 20 cents
From \$10.01 to	\$20.00.... 13 cents	From \$80.01 to	\$100.00.... 22 cents

## POSTAL RATES.—FOREIGN

**Letters.**—For the places in the following list the postal rate is 3 cents each ounce or fraction. For all other foreign destinations, 5 cents first ounce and 3 cents each additional ounce or fraction: Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras (Republic), Labrador, Mexico, Newfoundland, Nicaragua, Panama, Paraguay, Peru, Salvador, El; Spain and possessions; Uruguay, Venezuela.

**Letter Packages.**—Articles liable to customs duty may be sent at the letter rate to certain foreign countries. (Inquire at main office or classified stations.) The paper form of customs declaration (Form 2976-A), or an invoice, must be enclosed in each such package and the green label, Form 2976, must be affixed to the outside of the envelope or wrapper. The customs declaration and green label may be obtained free at the post office.

**Currency, Jewelry, and other precious articles.**—Coins, bank notes, paper money, or any values payable to bearer; platinum, gold, or silver, manufactured or unmanufactured; precious stones, jewelry, or other precious articles are prohibited in the unregistered mails. Money in cash, bank notes, or values payable to the bearer, whether sent in the registered or ordinary mails, are prohibited to certain countries, and in some cases may even be confiscated. Patrons should inquire at the main office or classified stations as to the admissibility of such articles in the letter mails to any particular foreign country.

**Post Cards.**—Single post cards for places enumerated above 2 cents. Single post cards for all other foreign destinations 3 cents. Maximum size 6x4½ inches, minimum size 4x2¾ inches.

**Printed Matter.**—1½ cents for each two ounces or fraction. Limit of weight: Inquire at Post Office. (Canada, 4 lbs., 6 oz.)

**Reduced Postage Rate on Books.**—For each pound or fraction—5 cents. Weight limit: 22 pounds, except in case of single volumes addressed to Cuba, El Salvador, Mexico or Panama, where there is no limit of weight. To Peru the weight limit for books is 11 pounds.

This reduced rate is applicable exclusively to books which do not contain publicity or advertising other than that appearing on the covers or fly-leaves, when addressed to the following countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Rep. of Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela.

**Samples of merchandise.**—For all foreign destinations, 1½ cents each 2 ounces or fraction, with a minimum charge of 3 cents. Limit of weight: 18 ounces.

**Commercial papers.**—For all foreign destinations, 1½ cents each 2 ounces or fraction, with a minimum charge of 5 cents. Limit of weight 4 lbs., 6 oz.

**Eight-ounce Merchandise Packages.**—Packages of merchandise weighing 8 ounces or less, for the countries specially named under "Letters" above, 2 cents for each 2 ounces, except that when the contents consist of seeds, scions, plants, cuttings, bulbs, or roots, the rate is 1½ cents for each 2 ounces. (This is not parcel post, must not have customs declarations attached, and must not be sealed except when addressed for delivery in Canada, in which case such packages should be marked "This may be opened for postal inspection if necessary." There is also an exception with respect to sealing in the case of c. o. d. 8-ounce merchandise packages for Mexico, which may be sealed.)

**Small Packets.**—Three cents for each 2 ounces, with a minimum charge of 15 cents per packet. Limit of weight: 2 pounds 3 ounces. (Inquire at main post office or classified stations for list of countries which accept small packets.) Small packets must bear the green label, Form 2976. They must also be accompanied by the paper form of customs declaration (Form 2976-A), properly completed by the sender and enclosed in the small packet. It is likewise permissible to enclose in small packets an open invoice reduced to its essential terms. Every small packet must be clearly marked on the wrapper by the sender with the words "small packet."

None of the articles mentioned under the heading "Currency, Jewelry, and other precious articles" above, may be forwarded in small packets, even though registered.



Mail service to many foreign countries has been suspended or greatly curtailed, due to war conditions. In view of frequent changes, inquire at post office before mailing articles addressed for delivery abroad.

**Maximum dimensions.**—For all foreign destinations on all classes of mail noted above (except Post Cards), 36 inches length, breadth and thickness combined, the length being limited to 24 inches. When sent in the form of a roll the length (the maximum of which is 32 inches) plus twice the diameter is limited to 40 inches.

**Registration fee.**—For all foreign destinations, 15 cents in addition to postage. When a return receipt is requested at the time of mailing there is an additional charge of 5 cents.

**Special-delivery (express) service** is now in force with the following foreign countries:

Argentina	Dominican Republic	Newfoundland (including Labrador)
Australia	Ecuador	Nyasaland Protectorate
Bahamas	Egypt	Palestine
Brazil	Gibraltar	Panama
British Guiana	Gold Coast Colony	Portugal
British Honduras (Belize only)	Great Britain and Northern Ireland	St. Pierre and Miquelon
Canada	Guatemala	Sweden
Chile	Ireland	Switzerland
China	Kenya and Uganda	Trans-Jordan
Cuba	Mexico	Union of South Africa
Cyprus	Morocco (Spanish Zone)	

An article intended for special (express) delivery in any of the countries mentioned above (except Canada, where the United States domestic fees apply) must be prepaid 20 cents, in addition to the regular postage, by United States special-delivery or other stamps, affixed to the cover. There should also be affixed one of the "express" labels (Form 2977) or the cover must be marked boldly in red ink "Express," directly below but never on the stamps. In some countries the service is limited to certain cities, lists of which appear under the country items in Part II of the Official Postal Guide. In Canada and Newfoundland express special-delivery service applies only to letters (or articles prepaid at the letter rate). In the other countries of the above list, the "express" feature is applicable to ordinary and registered Postal Union articles (letters, post cards, commercial papers, printed matter, samples, and small packets), but not to parcel-post packages.

#### INTERNATIONAL PARCEL POST.

All forms of articles and materials may be shipped to certain foreign countries under general license when the value of the individual shipment is \$25.00 or less, except as otherwise provided. The sender must endorse the general license number, consisting of the letter G followed by the number (which may be obtained from the Postmaster) assigned to the country of destination, in a conspicuous place on the address side of the wrapper. In cases, however, in which individual licenses are required, application should be made to the Office of Export Control, Board of Economic Warfare, 2501 Q Street, N. W., Washington, D. C.

No parcel or package of any class of mail addressed for delivery outside the continental United States shall be accepted for mailing if it exceeds 11 pounds in weight, or 18 inches in length, or 42 inches in length and girth combined, except as otherwise provided; also, not more than one such parcel or package shall be accepted for mailing in any one week when sent by or on behalf of the same person or concern to or for the same addressee. In the case, however, of the United Kingdom, not more than one parcel per month may be sent by the same sender to the same addressee, if sent as a bona fide unsolicited gift and may not exceed 5 pounds gross weight, nor contain more than 2 pounds of any one commodity.

Because of the varying rates and conditions, as well as frequent changes, applicable to foreign countries, it is important that a qualified postal employe handle parcel post transactions. Therefore, parcel post packages for foreign destinations must not be posted in a letter box; such packages should be taken to the main post office or to one of the larger classified stations and handed to a postal clerk.

#### POSTAL MONEY ORDERS.—INTERNATIONAL.

Limit of a Single Order, \$100.

For Orders from—

\$0.01 to \$10	10 cents
From \$10.01 to \$20	20 cents
Advancing thus to.....	From \$90.01 to \$100.....1 dollar

Air Mail in the Continental United States is 6 cents for each ounce or fraction thereof. This rate is also applicable to Canada.

The rate to Bahamas, Cuba, Dominican Republic, Haiti, Jamaica, British Virgin Islands, Mexico, Puerto Rico, and Virgin Islands of the United States, is 10 cents for each  $\frac{1}{2}$  ounce or fraction thereof.

## FOREIGN AIR MAIL POSTAGE RATES

<i>Destination</i>	<i>Rate per <math>\frac{1}{2}</math> ounce</i>	<i>Destination</i>	<i>Rate per <math>\frac{1}{2}</math> ounce</i>
Aden	.70	Iraq	.70
Afghanistan	.70	Ireland	.30
*Alaska	.06	Ivory Coast	.50
Algeria	.33	Jamaica	.10
Anglo-Egyptian Sudan	.70	Kenya, Uganda	.60
Angola (P.W.A.)	.60	Leeward Islands:	
Argentina	.40	Anguilla, Antigua, Barbuda,	
Azores	.30	Dominica, Montserrat,	
Bahamas	.10	Nevis, Redonda, St. Kitts	.15
Bahrein Islands	.70	Liberia	.50
Barbados	.25	Madagascar	.30
Belgian Congo	.60	Madeira	.30
Bermuda	.10	Malta	.70
Bolivia	.35	Martinique	.15
Brazil	.40	Mauritania	.45
British Guiana	.30	Mauritius	.60
British Honduras	.20	Mexico	.10
British Virgin Islands	.10	Morocco	.33
Cameroons, Br. & Fr.	.60	Mozambique (P.E.A.)	.60
*Canada	.06	Newfoundland	.15
Canal Zone	.15	Nicaragua	.12
Canary Islands	.30	Niger	.45
Cape Verde Islands	.55	Nigeria	.50
Ceylon	.70	Nyasaland	.60
Chile	.40	Palestine	.70
China (Unoccupied)	.70	Panama	.15
Colombia	.35	Paraguay	.40
Costa Rica	.15	Peru	.30
Cuba	.10	Portugal	.30
Curacao:		Portuguese Guinea	.50
Curacao Island, Aruba,		Portuguese East Africa	
Bonaire	.25	(See Mozambique)	
Saba, St. Eustatius,		Puerto Rico	.10
St. Martins	.10	Reunion	.30
Cyprus	.70	Rhodesia, No. & So.	.60
Dahomey	.45	Rio de Oro	.40
Dominican Republic	.10	Saudi Arabia	.70
Ecuador	.30	Senegal	.45
Egypt	.70	Sierra Leone	.50
El Salvador	.12	Somaliland, Br., Fr. & It.	.70
Eritrea	.70	Southwest Africa	.60
Ethiopia	.70	Spain (Spanish Offices in	
Falkland Islands	.40	North Africa)	.30
Faroe Islands	.30	Spanish Guinea	.50
French Equatorial Africa	.60	Surinam	.30
French Guiana	.30	Sweden	.30
French Guinea	.50	Syria & Lebanon	.70
French Sudan	.50	Tanganyika	.60
French Togoland	.45	Trans-Jordan	.70
Gambia	.50	Trinidad	.15
Gibraltar	.30	Tunisia	.33
Great Britain	.30	Turkey	.70
Guadeloupe	.15	Union of South Africa	.60
Guatemala	.12	Uruguay	.40
Gold Coast Colony	.50	Venezuela	.25
Haiti	.10	Virgin Islands, U. S.	.10
Hawaii	.20	Windward Islands:	
Honduras, Republic of	.12	Grenada, Grenadines,	
Iceland	.30	St. Lucia, St. Vincent	.15
India, Br., Fr. & Port.	.70	Yemen	.70
Iran	.70	Zanzibar	.60

\* 6 cents per ounce.

## JUDGES AND TERMS OF THE UNITED STATES CIRCUIT COURTS OF APPEALS

**FIRST CIRCUIT.** (Maine, Massachusetts, New Hampshire, Rhode Island, Puerto Rico)

Calvert Magruder, John C. Mahoney, Peter Woodbury, and (retired) George H. Bingham.

One term annually, at Boston, Massachusetts, commencing on the First Tuesday of October. Stated sessions during each term, commencing on the first Tuesday of each month, except July, August, and September, which may be adjourned to such times and places as the court may designate. Sessions may be convened from time to time, as required in the public interest, at San Juan, Puerto Rico.

**SECOND CIRCUIT.** (Connecticut, New York, Vermont)

Learned Hand, Thomas W. Swan, Augustus N. Land, Harrie Brigham Chase, Charles E. Clark, Jerome N. Frank, and (retired) Julian W. Mack.

One term annually, at the City of New York, on the first Monday of October, which may be adjourned to such times and places as the court may from time to time designate.

**THIRD CIRCUIT.** (Delaware, New Jersey, Pennsylvania, Virgin Islands)

John Biggs, Jr., Albert Branson Maris, Charles Alvin Jones, Herbert F. Goodrich, Gerald McLaughlin and (retired) J. Whitaker Thompson, Victor B. Woolley, Joseph Buffington.

One term annually, commencing on the first Monday of October. Stated sessions during each term, commencing on the first and third Monday of each month, except July, August and September. Sessions are held at Philadelphia, Pa., unless otherwise specially ordered by the court.

**FOURTH CIRCUIT.** (Maryland, North Carolina, South Carolina, West Virginia, Virginia)

John J. Parker, Morris A. Soper, Armistead M. Dobie, and (retired) Elliott Northcott.

Five terms annually, at Richmond, Virginia, commencing on the first Monday of October and April; at Charlotte, N. C. commencing on the first Monday of January; at Asheville, N. C., commencing on the first Monday in June; and at Baltimore, Md., commencing on the first Monday of November. Special terms may be held at any time on order of the court.

**FIFTH CIRCUIT.** (Alabama, Florida, Georgia, Louisiana, Mississippi, Texas, Canal Zone)

Samuel H. Sibley, Joseph C. Hutcheson, Jr., Edwin R. Holmes, Leon McCord, Curtiss L. Waller.

A session annually at Atlanta, Ga., commencing on the first Monday in October; at Montgomery, Alabama, commencing on the third Monday in October; at Fort Worth, Texas, commencing on the first Monday in November; at New Orleans, La., commencing on the third Monday in November. The session may be adjourned to such other times and places as the court may from time to time order and designate.

**SIXTH CIRCUIT.** (Kentucky, Michigan, Ohio, Tennessee)

Xen Hicks, Charles C. Simons, Florence E. Allen, Elwood Hamilton, John D. Martin, Sr., Thomas F. McAllister.

One term annually beginning on the first Monday of October, and adjourned sessions on the first Monday of each alternate month thereafter, except that there are no sessions for the hearing of cases during July, August and September. All sessions at Cincinnati, Ohio, unless otherwise specially ordered by the court.



**SEVENTH CIRCUIT.** (Illinois, Indiana, Wisconsin)

Evan A. Evans, William M. Sparks, J. Earl Major, Otto Kerner, Sherman Minton.

One term annually, at Chicago, Illinois, from the first Tuesday in October until the first Tuesday of the next October. Unless otherwise specially ordered, the court holds three sessions commencing respectively on the first Tuesday in October and the second Tuesday in January and April.

**EIGHTH CIRCUIT.** (Arkansas, Iowa, Minnesota, Missouri, Nebraska, North Dakota, South Dakota)

Kimbrough Stone, Archibald K. Gardner, John B. Sanborn, Joseph W. Woodrough, Seth Thomas, Harvey M. Johnson, Walter G. Riddick, and (retired) Arba S. Van Valkenburgh, Wilbur F. Booth.

General terms at Kansas City, Mo., commencing on the first Monday of March; at St. Paul, Minnesota, commencing on the first Monday of May and the first Tuesday of September; at Omaha, Nebraska, commencing on the first Monday of January; and at St. Louis, Missouri, commencing on the first Monday of November. Terms may be adjourned to other times and places.

**NINTH CIRCUIT.** (Arizona, California, Idaho, Montana, Nevada, Oregon, Washington, Alaska, China, Hawaii)

Curtis D. Wilbur, Francis A. Garrecht, William Denman, Clifton Mathews, Bert E. Haney, Albert Lee Stephens, William Healy.

One term annually, at Seattle, Washington, commencing on the second Monday of September with a session in September and in March or April; at Portland, Oregon, commencing on the third Monday of September with a session in September and in March or April; at Los Angeles, California, commencing on the fourth Monday of September; and at San Francisco, California, commencing on the first Monday of October.

**TENTH CIRCUIT.** (Colorado, Kansas, New Mexico, Oklahoma, Utah, Wyoming)

Orie L. Phillips, Sam Gilbert Bratton, Walter A. Huxman, Alfred P. Murrab, and (retired) Robert Lee Williams.

Three terms annually, one each at Denver, Colorado; Wichita, Kansas; and Oklahoma City, Oklahoma, commencing on dates fixed by special order of court. These terms may be adjourned to such times and places as the court may from time to time designate.

**UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA.**

*Chief Justice:* D. Lawrence Groner (of Virginia). *Associate Justices:* Harold M. Stephens (of Utah), Justin Miller (of California), Fred M. Vinson (of Kentucky), Henry White Edgerton (of New York), Thurman W. Arnold (of Wyoming) *Retired Chief Justice:* George E. Martin.

No stated terms. Court holds sessions in Washington, D. C. or in other places designated by the chief judge, and at such times as may be fixed by the chief judge.

*Note:* List of Judges corrected to August 15, 1943.

Data as to terms of the courts revised to July, 1943.

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## WHY PAINT PEELS

By GEORGE B. HECKEL

*The excerpts which follow are taken from a pamphlet first copyrighted by the author in 1909 and reprinted in many editions since. Single copies of the booklet are available from the Paint Industry Magazine, Philadelphia, Pa. 30c.*

Paint failures on surfaces exposed to the weather are commonly traceable to one of a few preventable causes.

**1. Dampness in the wood.** This means not only wood which is damp to sight or touch but also wood that is imperfectly seasoned; wood that has been recently exposed to rain; wood that has just been saturated with fog or dew or coated with frost. It is generally thought advisable to allow a new building to stand for a month or two unpainted. Painting should be done in dry weather—preferably after a "dry spell". It is perhaps better to paint during the settled weather of the fall than during the unsettled weather of the spring.

**2. Dampness back of the wood.** This is more commonly due to green plaster than to any other cause. A new house should never be painted until the plaster is thoroughly dry—and even after that it is safer to let the house stand a month to allow the moisture to get completely out of the wood.

**3. Ochre priming coats.** The imported ochres of our grandfathers made by nature with a silica (flint) base did make a fairly good priming coat; but modern cheap ochres are nothing but clays stained with iron rust. These make slippery brittle treacherous paints unfit for use as primers.

**4. Old paint, loosely attached to the wood and not thoroughly cleaned away.** Repaint before the old paint begins to go. Paint clings to wood because it penetrates the wood's pores and as long as the penetrating "fingers" of the paint retain their "life" paint will cling. Upon becoming brittle these fingers let go and the paint is then seen to scale or peel. If fresh paint is applied (and remember three thin coats of any paint are always better than two thick coats) before this occurs, the undercoat will cling indefinitely. In case the undercoat has become brittle the only remedy is to scrape, sandpaper, and wire brush away all loose particles before repainting. If it is too bad, the only safe way is to remove the old paint completely either by means of a paint remover or with a painter's torch.

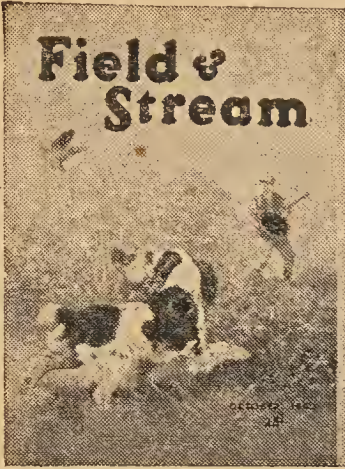
**5. Fat, resinous wood not properly seasoned or prepared for painting.** Rosin in yellow pine keeps paint from taking hold—or makes the paint itself brittle. Knots and streaks will have to be coated with shellac before paint is applied. Much turpentine and little oil should be used in the priming coat and more turpentine than usual in the second coat. A little pine tar in the priming coat is said to be helpful. At best, however, paint will sometimes peel on yellow pine.

Cyprus is also troublesome and requires thin coats, plenty of turpentine in the priming coat, and thorough drying of each coat before the next is applied. Toluol is said to be a good thinner.

**6. Faulty building construction.** The inner side of the clapboarding of modern frame houses is lined with impervious paper, and the space between this and the inner wall comprises a series of unventilated chambers. Moisture collects on the tar paper, and since the space is unventilated, has to escape through the plaster causing the oil paint coating to peel. The only remedy is to use paint designed for this purpose, or provide a waterproof coating before painting.

Other causes of paint peeling are: application to dirty or greasy surfaces or over varnish, leaking roofs or water pipes, use of adulterated linseed oil or kerosene, non hardened undercoats, or coats which are too thick.

It will be seen in the circumstances enumerated that paint—any paint—will peel. The better the paint the more likely it is to peel under these conditions. The root of the trouble of course lies in moisture. Moisture under paint must, in escaping, either pass through the paint (which it can't do if the paint is any good) or push the paint off.



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## THE WORLD'S "BEST" COMBAT AEROPLANES — SUMMER 1943

(Name of country precedes name of each plane in italics)

Manufacturer	Type	Total H.P.	Max. Sp'd	Range with Bombs	Span	Lgth.	Ht.	Service Ceiling
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## 1. Single engine fighters: Some might pick the Hawker Typhoon for the Spitfire in this group

(U.S.) Republic (Thunderbolt)	P47	2000	400+	1400+	41	33	13	40,000+
(Br.) Vickers Supermarine (Spitfire)	IXC	1600	400+	750+	37	31	8	45,000+
(G.) Focke Wulf	190II	1650	395	900	34	29	—	30,000
(I.) Macchi (Saetta)	C202	1200	350	460	35	29	11	35,000
(J.) Mitsubishi (Messerschmitt, Zero) or Betty	S01	1500	354	600	35	25	9	36,000
(R.) U.S.S.R.	I18	1250	375	650	38	32	10	—

## 2. Single engine ground attack or torpedo bombers

(U.S.) Grumman (Avenger)	TBF	1700	270	1400	53	37	—	20,000
(Br.) Fairey (Battle)	—	1030	270	1000	54	42'	16	25,000
(G.) Junkers (Stuka)	87B	1200	250	500	45	36	13	28,000
(I.) Meridionale	RO37 bis	700	205	1090	36	28	19	25,000
(J.) Mitsubishi (Mk II)	KB97	800	310	1490	39	28	12	20,000
(R.) U.S.S.R.	R10	1600	280	1700	50	37	10	—

## 3. Two engine ground attack or fighter bombers: Try the De Havilland Mosquito for the Whirlwind

(U.S.) Douglas (Boston III)	A20	2550	350	—	61	47	18	—
(Br.) Westland (Whirlwind)	—	2240	390	—	45	32	10	—
(G.) Dornier	DO217E	4000	350	1800	62	56	—	22,500
(I.) Breda	BR88	2000	350	1450	51	38	—	28,500
(J.) Kawasaki	S-01	2400	365	1500	53	40	10	35,000
(R.) U.S.S.R.	I-21	2600	400+	—	—	—	—	—

## 4. Two engine long range bombers: North American Mitchell (B25) could be for the "Cat" if some real fancy Business at hand

(U.S.) Consolidated (Catalina)	Boat	2400	130	3000	104	65	19	25,700
(Br.) Vickers (Wellington)	III	2740	265	2000	86	63	17	26,000
(G.) Heinkel	HE177	4600	280	3500	103	67	18	—
(I.) Caproni	405	1660	260	1550	59	51	11	24,600
(J.) Nakajima (Akatsuki)	—	1500	205	3000 ?	85	48	—	—

## 5. Three engine

(G.) Junkers	52/3MK	2550	159	1000	96	62	15	—
(I.) Savoia Marchetti	SM84	—	295	4960	—	—	—	—
(J.) Kawasaki	H90-2	2475	135	1600	101	72	—	—

## 6. Four engine strategic bombers: Might try Consolidated's Liberator (B24E) here for the Fortress (Range 2600)

(U.S.) Boeing (Flying Fortress)	B17F	5000	300	2000	104	73	16	40,000
(Br.) Roe (Lancaster)	V	5600	300	2000	102	69	20	30,000
(G.) Focke Wulf (Condor)	200B	4000	280	1500	108	78	20	28,000
(I.) Cant Z	511	—	261	2000	131	93	36	—
(J.) Aichi	Me98	1080	233	2200	72	45	12	21,650
(R.) U.S.S.R.	TB6	4200	310	2500	—	—	—	—

## 7. Six engine: U. S. types here, and larger, restricted

(F.) Latecoere	Boat 631	9600	220	3720+	188	54	—	—
(G.) Blohm Voss	BV222	6000	200	4000	150	112	—	—
(R.) U.S.S.R.	L760	6600	200	1900	212	112	—	—

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## PRINCIPAL HOLIDAYS, ETC. IN 1944

America has no nationwide holidays. Each state determines its own. In the table that follows (\*) indicates these quite generally observed by all states; (\*\*) indicates those for only certain states; and (\*\*\*) indicates days usually observed in some localities though probably not observed as holidays. Only continental United States is covered here. The President has asked that no holidays be observed by war workers except Christmas.

Jan. 1 (*)	May 4 (**) R. I. Independence Day
Jan. 8 (**) Battle of New Orleans	May 10 (**) Memorial Day (N. C. & S. C.)
Jan. 19 (**) Robert E. Lee's Birthday	May 14 (***) Mother's Day
Feb. 12 (**) Abraham Lincoln's Birthday	May 20 (**) Meeklenburg Day (N. C.)
Feb. 14 (**) Admission Day (Arizona)	May 30 (*) Decoration or Memorial Day
Feb. 14 (***) Valentine's Day	June 3 (**) Jefferson Davis Day (Ala., Ark., Fla., Ga., La., Miss., S. C., Tenn., Tex. & Va.)
Feb. 15 (***) Susan B. Anthony Day	June 14 (**) Flag Day (Ia., Mo. & Pa.)
Feb. 22 (*) George Washington's Birthday	June 17 (**) Bunker Hill Day (Suffolk County, Mass.)
Feb. 22 (**) Mardi Gras	June 15 (**) Pioneer Day (Idaho)
Mar. 1 (**) State Day (Nebraska)	June 18 (***) Father's Day
Mar. 2 (**) Texas Independence Day	July 4 (*) Independence Day
Mar. 15 (**) Jackson Day (Tennessee)	July 13 (**) Forrest's Day (Tenn.)
Mar. 17 (**) St. Patrick's or Evacuation Day	July 24 (**) Pioneer Day (Utah)
Mar. 25 (**) Maryland Day	Aug. 1 (**) Colorado Day
Apr. 1 (**) State Election (Michigan)	Aug. 16 (**) Bennington, Vt. Battle Day
Apr. 2 (**) Arbor Day (Arizona)	Aug. 19 (***) National Aviation Day
Apr. 6 (**) Army Day	Aug. 30 (**) Huey Long Day (La.)
Apr. 7 (**) Good Friday (Conn., Del., Fla., La., Md., Minn., N. J., Penn. & Tenn.)	Sept. 4 (*) Labor Day
Apr. 10 (**) Easter Monday (N. Car.)	Sept. 9 (**) Admission Day (Cal.)
Apr. 12 (**) Halifax Day (N. Car.)	Sept. 12 (**) Defender's Day (Md.)
Apr. 13 (**) Jefferson Day (Mo., Okla., Va.)	Sept. 17 (***) Constitution Day
Apr. 14 (***) Pan American Day	Sept. 22 (***) Am. Indian Day
Apr. 19 (**) Patriot's Day (Me., Mass.)	Oct. 12 (*) Columbus Day
Apr. 21 (**) San Jacinto Day (Texas)	Oct. 27 (***) Navy Day
Apr. 22 (**) Arbor Day (Neb.)	Oct. 31 (**) Nevada Day
Apr. 20 or 27 (**) Fast Day (N. H.)	Nov. 1 (**) All Saints' Day (La.)
Apr. 26 (**) Memorial Day (Fla., Ga., Miss.)	Nov. 7 (*) Election Day
May 1 (***) National Maritime Day	Nov. 11 (**) Armistice Day
	Nov. 23 (**) Repudiation Day (Md.)
	Nov. 30 (*) Thanksgiving
	Dec. 21 (***) Forefather's Day
	Dec. 25 (*) Christmas Day



## FARM POPULATION MOVEMENT, FARM VALUATIONS, TAX LEVIES, ETC., 1932 TO DATE

REGION and YEAR	Farm Population movement <sup>1</sup>		Est. total value, farm land & bldgs. millions of dollars	Tax levies per acre on farm real estate		
	Farm to city Thou- sands	City to farm Thou- sands		1909-13 Ave. Dol.	Amount Dollars	Index Nos. 1909-13 = 100 Percent
<b>New England:</b>				.37		
1932		13	918		1.02	275
1933		2	862		.97	259
1934	3		878		1.02	273
1935	8		901		1.09	292
1936	1		872		1.10	296
1937		11	848		1.12	300
1938		14	807		1.14	306
1939		12	768		1.17	314
1940	4		741		1.16	311
1941	10		745		1.16	311
1942	22		760			
<b>Middle Atlantic</b>				.46		
1932		45	2,497		1.15	249
1933	12		2,148		1.04	225
1934	9		2,124		1.01	218
1935	35		2,141		1.02	220
1936	23		2,168		1.04	225
1937	6		2,146		1.07	232
1938		6	2,128		1.09	235
1939	8		2,067		1.12	241
1940	29		2,039		1.11	240
1941	56		2,052		1.11	241
1942	70		2,133			
<b>East North Central:</b>				.43		
1932		135	7,149		.91	212
1933	69		6,054		.72	168
1934	81		6,361		.66	154
1935	84		6,597		.69	160
1936	84		6,921		.70	162
1937	76		7,320		.71	166
1938	33		7,368		.73	170
1939	50		7,284		.75	175
1940	83		7,334		.76	177
1941	178		7,464		.77	179
1942	207		8,346			
<b>West North Central:</b>				.20		
1932		19	11,370		.47	235
1933	68		8,943		.41	205
1934	99		9,298		.39	198
1935	139		9,385		.41	207
1936	163		9,622		.42	210
1937	173		9,597		.43	217
1938	97		9,356		.43	217
1939	83		9,030		.44	220
1940	98		8,796		.42	210
1941	199		8,776		.42	212
1942	219		9,327			
<b>South Atlantic:</b>				.12		
1932		44	2,958		.38	315
1933	105		2,470		.30	250
1934	69		2,650		.29	241
1935	68		2,792		.29	237
1936	124		2,919		.29	238
1937	65		3,107		.30	250
1938	97		3,164		.28	234
1939	111		3,143		.28	236
1940	128		3,160		.29	244
1941	243		3,241		.30	245
1942	305		3,438			

REGION and YEAR	Farm Population movement <sup>1</sup>		Est. total value, farm land & bldgs. millions of dollars	Tax levies per acre on farm real estate		
	Farm to city Thou- sands	City to farm Thou- sands		1909-13 Ave. Dol.	Amount Dollars	Index Nos. 1909-13 = 100 Percent
<b>East South Central:</b>				.13		
1932		26	2,058	.33	298	
1933	76		1,691	.37	286	
1934	37		1,787	.34	266	
1935	118		1,915	.35	272	
1936	87		1,990	.36	281	
1937	80		2,107	.37	283	
1938	57		2,228	.32	251	
1939	126		2,264	.32	252	
1940	137		2,325	.33	257	
1941	283		2,396	.34	261	
1942	308		2,626			
<b>West South Central:</b>				.09		
1932		30	4,280	.23	242	
1933	96		3,618	.21	219	
1934	66		3,886	.20	209	
1935	141		4,030	.19	198	
1936	169		4,143	.19	198	
1937	122		4,184	.18	189	
1938	123		4,296	.18	189	
1939	117		4,193	.18	191	
1940	142		4,232	.18	186	
1941	261		4,262	.18	188	
1942	354		4,552			
<b>Mountain:</b>				.08		
1932	16		2,029	.16	201	
1933	29		1,698	.15	183	
1934	22		1,728	.14	173	
1935	40		1,772	.13	165	
1936	38		1,824	.13	154	
1937	28		1,854	.13	155	
1938	14		1,820	.12	151	
1939	17		1,794	.13	157	
1940	32		1,780	.12	152	
1941	80		1,821	.12	149	
1942	72		1,968			
<b>Pacific:</b>				.29		
1932		29	3,978	.70	241	
1933	29		3,240	.54	186	
1934	29		3,221	.52	178	
1935	9		3,325	.49	171	
1936	1		3,380	.50	171	
1937		10	3,456	.57	196	
1938	9		3,390	.55	191	
1939		9	3,277	.57	195	
1940	28		3,237	.57	196	
1941	47		3,268	.54	186	
1942	70		3,461			
<b>United States:</b>				.21		
1932		325	37,236	.46	220	
1933	482		30,724	.39	188	
1934	415		31,933	.37	178	
1935	642		32,859	.37	180	
1936	690		33,839	.38	181	
1937	529		34,621	.39	186	
1938	420		34,557	.38	183	
1939	491		33,820	.39	186	
1940	681		33,642	.38	183	
1941	1,357		34,026	.38	183	
1942	1,627		36,611			

Division of Statistical and Historical Research, Bureau of Agricultural Economics, June 12, 1943. Note that some of the figures in the 1943 OFA table have been revised.

<sup>1</sup> Includes persons who entered the armed forces.

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Courtesy O.W.I., Aug. 15, 1943







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## ANSWERS TO CHARADES ON PAGE 44

1. Support. 2. Teaspoon. 3. Phantom. 4. Siberia, Liberia, Iberia, Tiber, Tibet.  
5. Ararat. 6. Evergreen. 7. Chinchilla. 8. Chrysanthemum. 9. Chimney-piece.

## ANSWERS TO PUZZLES ON PAGE 45

1. A Plum Pudding. (1) Mace (M-ace). (2) Flour (Flower). (3) Clove (C-love).  
(4) Currants (currents). (5) Indian-meal. (6) Allspice (awis-p-lee). (7) Molasses  
(Mo. lasses). (8) Candied lemon-peel (candid-lemon peel). (9) Citron (sit run).  
(10) Suet (Suc ate).  
2. 763 times around the world.  
3. (1) Cleveland. (2) Garfield. (3) Madison. (4) Washington. (5) July. July  
death dates for Presidents as follows: July 4, 1826, John Adams, July 4, 1826, Jefferson,  
July 4, 1831, Monroe, July 9, 1850, Taylor, July 24, 1862, Van Buren, July 31, 1875,  
Johnson, July 2, 1881, Garfield, July 23, 1885, Grant.  
4. Clio, one of the nine muses.  
5. (1) Part—trap. (2) Paws—swap. (3) Liar—rail. (4) Bat—tab. (5) Raps—spar.  
(6) Snub—buns. (7) Bard—drab. (8) Fled—delf.  
6. Never condemn what you do not understand.

*The War Production Board ruling that we use 10% less paper this year than last has occasioned a 16 page smaller book in order to allow for our normal distribution... purposely cut back last year to help the war effort.*



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Holidays, Seasons, Trade Winds, &c.

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Jan.	3	<b>93rd Birthday commences</b>	
Feb.	1	<b>Furniture Values</b> for ye thrifty-minded.	
Feb.	14	<b>Valentine's Day</b>	Romantic gifts from JORDAN MARSH
Mar.	21	<b>SPRING COMMENCES</b>	New clothes blooming for the womenfolk
Apr.	1	<b>Garden Shop Ready</b>	Showers; rain gear indicated
Apr.	9	<b>Easter Sunday</b>	Easter parade of Mraiment
May	1	<b>GET READY FOR OUTDOORS</b>	Summer furniture, summer cottons
Jun.	20	<b>Schools CLOSED</b>	Buy Children's vacation playclothes
Jul.	4	<b>Independence Day</b>	
Aug.	30	<b>Vacation Season ends</b>	Back-to-School shopping at Jordan Marsh
Sep.	1	<b>Housewares Event commences!</b>	
Sep.	21	<b>FALL COMMENCES</b>	Get warm clothes, &c. against coming of frost
Oct.	12	<b>Columbus Day</b>	
Nov.	24	<b>Thanksgiving Day</b>	China, linens, &c., for Season's entertaining
Dec.	21	<b>Winter Commences</b>	Overshoes & snow gear
Dec.	25	<b>A Merry Christmas to All</b>	

Shoppers' Calendar

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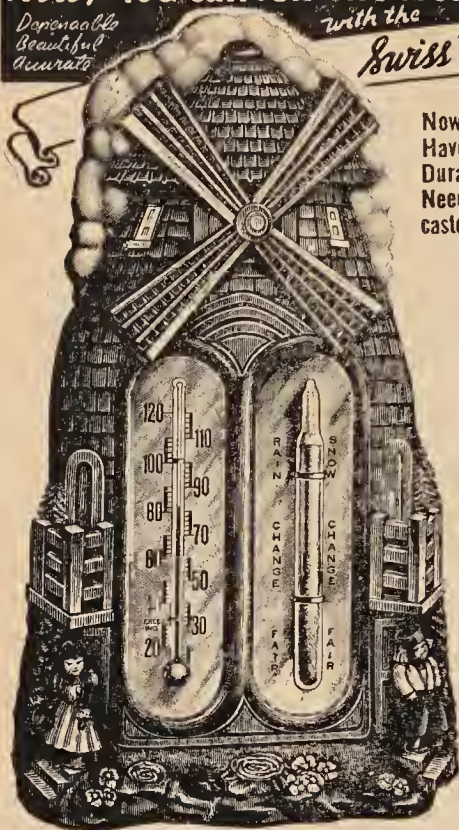
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